

**TRAVERSE MOUNTAIN AREA PLAN
CULINARY WATER**

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TRAVERSE MOUNTAIN AREA PLAN
CULINARY WATER
November 23, 2011

The approved concept plan dated November 23, 2011 was used to model the culinary water system for the Traverse Mountain area plan. The culinary system was modeled using Bentley System Water Cad version 8. Attached are the results of the model. The model was completed following the requirements of the Lehi City Development Code and the State of Utah Rules for Public Drinking Water Systems. A summary of the design criteria used is shown in figure 1.

The culinary water system will require the following:

	<u>2011 Analysis</u> **
Total Peak Day Flow & Source	3993 GPM
Total Storage Requirement	2,904,000 gal

Wells will be drilled to produce the required 3812 gpm source requirement. Assuming that a well produces 1400 gpm and the existing well produces 1400 gpm, the development would need to develop 2 more wells or find a source off site.



FIGURE 1
 TRAVERSE MOUNTAIN AREA PLAN
 CULINARY WATER DESIGN CRITERIA

Description	Assumption
Minimum Pipe Size	6-inch / Commercial 10-inch
Pipe Roughness Coefficient	130
Equivalent Residential Unit (ERU)	Residential: 1 Unit = 1 ERU Commercial/Civic: 2.7 ERU/Acre Recreational: 0.3 ERU/Acre
Average Daily Flow	400 gallons per day (GPD)/ERU* (equivalent to .28 GPM/ERU)
Peak Day Flow (PDF) & Source Requirement	800 GPD/ERU* (equivalent to 0.55 GPM/ERU)
Peak Hourly Flow (PIF)	1.0 GPM/ERU
Storage Requirement	400 GPD/ERU * (equivalent to one half of a peak day)
Fire Flow Requirement	500 GPM for sprinkler systems in School, Commercial, and Office Buildings. Plus PHF at 50 psi
Minimum Pressure	40 psi at peak instant
Maximum Pressure	120 psi
Tank Inlet-Outlet Pipe Sizing	Maximum Headloss: 6 feet/1000 linear feet of pipe with a flow equal to Peak Hour Flow plus Fire Flow
Pump Transmission Pipe Sizing	<ul style="list-style-type: none"> • Maximum Headloss: 3 feet/1000 linear feet of pipe with a flow equal to pump capacity

*Note: As recommended by the State of Utah Rules For Public Drinking Water.

Modeling Scenarios	<p data-bbox="812 231 1185 262"><u>Scenario 1: PIF with Sprinklers</u></p> <ul data-bbox="844 273 1201 430" style="list-style-type: none"><li data-bbox="844 273 1201 304">• Tanks 1/3 Full, Pumps off<li data-bbox="844 315 1055 346">• 0.8 GPM/ERU<li data-bbox="844 357 1169 388">• 500 GPM fire sprinklers<li data-bbox="844 399 1185 430">• Minimum Pressure 50 psi <p data-bbox="812 441 990 472"><u>Scenario 2: PIF</u></p> <ul data-bbox="844 483 1201 598" style="list-style-type: none"><li data-bbox="844 483 1201 514">• Tanks 1/3 Full, Pumps off<li data-bbox="844 525 1071 556">• 1.0 GPM/ERU<li data-bbox="844 567 1201 598">• Minimum Pressure 40 psi
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The following exhibits are attached:

1. Traverse Mountain Culinary Pipe Sizes.
2. Traverse Mountain Area Plan Culinary Schematic.
3. Traverse Mountain Culinary Water System Requirements.
4. Culinary Water Design
 - Scenario 1: PHF With Sprinklers
 - Scenario 2: PIF



FIGURES
WAT - 4

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**CULINARY WATER
SYSTEM REQUIREMENTS
WAT - 7**

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TRAVERSE MOUNTAIN AREA PLAN									
CULINARY WATER SYSTEM REQUIREMENTS									
TANK ZONE SUMMARY									
Description	Total Area	Total Density	Units per acre	Commercial / Parks	Total	Storage Requirement	Peak Day	Peak Hour	
									ERU'S
West/Central Canyons									
Total West/Central Canyons Zone 1	104.8	752	7.18	5	757	302,780	416	606	
Total West/Central Canyons Zone 2	59.7	398	6.67	2	400	159,800	220	320	
Total West/Central Canyons Zone 3	77.8	627	8.06	3	630	251,824	346	504	
Total West/Central Canyons:	242.3	1,777	7.33	9	1,786	714,404	982	1,429	
East Canyon									
Total East Canyon Zone 1	34.9	68	3.92	0	68	27,200	37	54	
Total East Canyon Zone 2	97.3	290	24.03	6	296	118,448	163	237	
Total East Canyon Zone 3	34.3	575	71.13	1	576	230,240	317	460	
Total East Canyon	166.5	933	5.60	7	940	375,888	517	752	
Oak Hollow									
Total Oak Hollow Zone 1	347.7	1,279	3.68	29	1,308	523,256	719	1,047	
Total Oak Hollow Zone 2	471.9	2,508	5.31	296	2,804	1,121,776	1,542	2,244	
Total Oak Hollow Zone 3	164.7	0	0.00	422	422	168,638	232	337	
Total Oak Hollow	984.3	3,787	3.85	748	4,534	1,813,670	2,494	3,627	
Canyons	408.8	2,710	6.63	16	2,726	1,090,292	1,499	2,181	
Oak Hollow	984.3	3,787	3.85	748	4,534	1,813,670	2,494	3,627	
Total Water Requirements	1,393.0	6,496	4.66	764	7,260	2,903,962	3,993	5,808	
West Canyon	72.1	600	8.32	3	603	241,260	332	483	
Central Canyon	136.3	900	6.60	6	906	362,424	498	725	
East Canyon	113.0	826	7.31	7	833	333,088	458	666	
Riverbend	88.7	519	5.85	0	519	207,600	285	415	
Non Canyon	18.5	99	5.35	0	99	39,600	54	79	
Platted	586.4	2,038	3.48	274	2,313	925,052	1,272	1,850	
Perry Homes	168.6	968	5.74	5	973	389,000	535	778	
Commercial	209.5	546	2.61	469	1,015	405,938	558	812	
Total Water Requirements	1,393.0	6,496	4.66	764	7,260	2,903,962	3,993	5,808	



TRAVERSE MOUNTAIN AREA PLAN									
CULINARY WATER SYSTEM REQUIREMENTS									
TANK ZONE SUMMARY									
Description	Area	Total Area	Total Density	Units per acre	Commercial / Parks	Total	Storage Requirement	Peak Day	Peak Hour
					ERU's	ERU's	Gallons	GPM	GPM
West/Central Canyons Zone 1									
B1	West Canyon	3.70	16	5.00		16.00	6400	9	13
B2	West Canyon	1.90	10	5.26		10.00	4000	6	8
C1	West Canyon	12.80	105	8.20		105.00	42000	58	84
C2 - Park	West Canyon	3.00	0	0.00	0.90	0.90	360	0	1
D1	West Canyon	5.70	103	18.07		103.00	41200	57	82
E1	West Canyon	11.00	176	16.00		176.00	70400	97	141
E2 - Park	West Canyon	3.00	0	0.00	0.90	0.90	360	0	1
F1	West Canyon	10.30	40	3.88		40.00	16000	22	32
F2 - Park	West Canyon	2.00	0	0.00	0.60	0.60	240	0	0
F3	West Canyon	3.20	16	5.00		16.00	6400	9	13
E1	Central Canyon	13.00	84	6.46		84.00	33600	46	67
E2 - Park	Central Canyon	2.00	0	0.00	0.60	0.60	240	0	0
F1 - Park	Central Canyon	3.00	0	0.00	0.90	0.90	360	0	1
F2	Central Canyon	10.20	65	6.37		65.00	26000	36	52
F3 - Park	Central Canyon	2.00	0	0.00	0.60	0.60	240	0	0
G1	Central Canyon	8.90	57	6.40		57.00	22800	31	46
G2 - Park	Central Canyon	1.50	0	0.00	0.45	0.45	180	0	0
C	Riverbend	2.38	16	6.72		16.00	6400	9	13
D	Riverbend	5.70	64	11.23		64.00	25600	35	51
Total West/Central Canyons Zone 1		104.78	752	7.18	5	757	302780	416	606
West/Central Canyons Zone 2									
A1	West Canyon	6.50	78	12.00		78.00	31200	43	62
A2 - Park	West Canyon	2.50	0	0.00	0.75	0.75	300	0	1
A3	West Canyon	7.00	56	8.00		56.00	22400	31	45
B	Central Canyon	7.00	44	6.29		44.00	17600	24	35
C	Central Canyon	5.70	36	6.32		36.00	14400	20	29
D1	Central Canyon	8.90	56	6.29		56.00	22400	31	45
D2 - Park	Central Canyon	1.50	0	0.00	0.45	0.45	180	0	0
H1	Central Canyon	8.90	56	6.29		56.00	22400	31	45
H2 - Park	Central Canyon	1.00	0	0.00	0.30	0.30	120	0	0
C	RiverBend	10.71	72	6.72		72.00	28800	40	58
Total West/Central Canyons Zone 2		59.71	398	6.67	2	400	159800	220	320
<p>Flex Property not to exceed 500 Total Units</p> <p>Commercial ERU = 2.7 x Acres</p> <p>School ERU = 2.7 x Acres</p> <p>Church ERU = 2.7 x Acres</p> <p>Parks ERU = 0.3 x Acres</p>									

TRAVERSE MOUNTAIN AREA PLAN									
CULINARY WATER SYSTEM REQUIREMENTS									
TANK ZONE SUMMARY									
Description	Area	Total Area	Total Density	Units per acre	Commercial / Parks	Total	Storage Requirement	Peak Day	Peak Hour
West/Central Canyons Zone 3									
A1	Central Canyon	8.80	55	6.25		55.00	22000	30	41
A2 - Park	Central Canyon	1.50	0	0.00	0.45	0.45	180	0	0
I1	Central Canyon	7.40	47	6.35		47.00	18800	26	38
I2 - Park	Central Canyon	1.00	0	0.00	0.30	0.30	120	0	0
J1	Central Canyon	12.90	141	10.93		141.00	56400	78	113
J2 - Park	Central Canyon	1.50	0	0.00	0.45	0.45	180	0	0
K1	Central Canyon	7.90	79	10.00		79.00	31600	43	63
K2 - Park	Central Canyon	2.00	0	0.00	0.60	0.60	240	0	0
L1	Central Canyon	12.50	100	8.00		100.00	40000	55	80
L2 - Park	Central Canyon	2.00	0	0.00	0.60	0.60	240	0	0
M1	Central Canyon	4.00	80	20.00		80.00	32000	44	64
N - Park	Central Canyon	1.20	0	0.00	0.36	0.36	144	0	0
C	RiverBend	10.71	72	6.72		72.00	28800	40	58
B	RiverBend	4.35	53	12.14		52.80	21120	29	42
Total West/Central Canyons Zone 3		77.76	627	8.06	3	630	251824	346	504
East Canyon Zone 1									
E	Riverbend	18.90	34	1.80		34.00	13600	19	27
F	Riverbend	16.00	34	2.13		34.00	13600	19	27
Total East Canyon Zone 1		34.90	68.00	3.92	0.00	68.00	27200.00	37.40	54.40
East Canyon Zone 2									
C1	East Canyon	13.90	64	4.60		64.00	25600	35	51
C2 - Park	East Canyon	5.40	0	0.00	1.62	1.62	648	1	1
D1	East Canyon	3.20	15	4.69		15.00	6000	8	12
D2	East Canyon	13.90	42	3.02		42.00	16800	23	34
D3	East Canyon	15.00	65	4.33		65.00	26000	36	52
D4	East Canyon	12.30	65	5.28		65.00	26000	36	52
D5 - Park	East Canyon	2.00	0	0.00	0.60	0.60	240	0	0
D6 - Park	East Canyon	13.00	0	0.00	3.90	3.90	1560	2	3
Violetto	Platted	18.60	39	2.10		39.00	15600	21	31
Total East Canyon Zone 2		97.30	290.00	24.03	6.12	296.12	118448.00	162.87	236.90
East Canyon Zone 3									
A1	East Canyon	10.00	180	18.00		180.00	72000	99	144
A2	East Canyon	10.10	202	20.00		202.00	80800	111	162
A3	East Canyon	3.20	58	18.13		58.00	23200	32	46
A4 - Park	East Canyon	2.60	0	0.00	0.60	0.60	240	0	0
B1	East Canyon	9.00	135	15.00		135.00	54000	74	108
Total East Canyon Zone 3		34.90	575.00	71.13	0.60	575.60	230240.00	316.58	460.48



**TRAVERSE MOUNTAIN AREA PLAN
CULINARY WATER SYSTEM REQUIREMENTS
TANK ZONE SUMMARY**

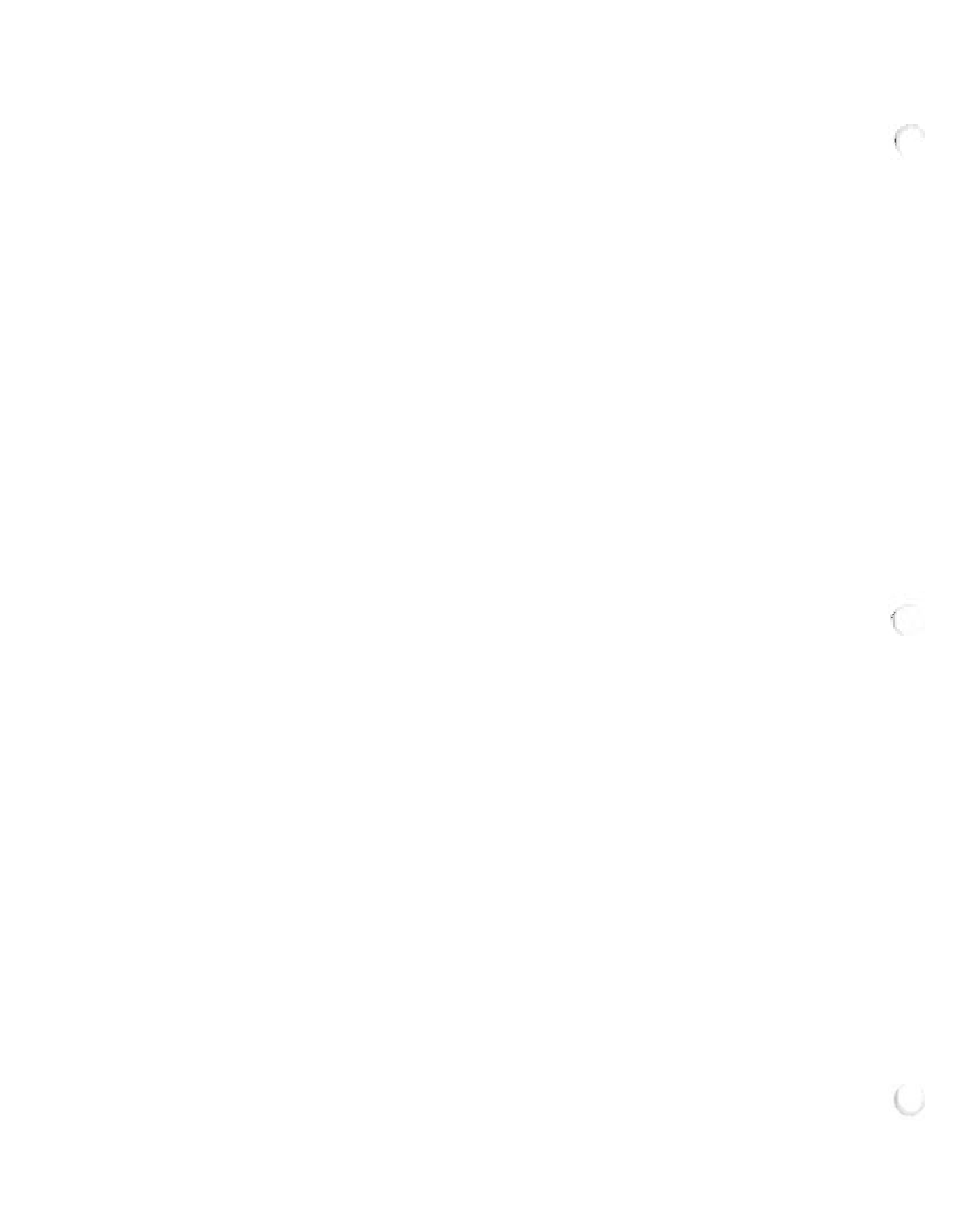
Description	Area	Total Area	Total Density	Units per acre	Commercial / Parks	Total	Storage Requirement	Peak Day	Peak Hour
						ERU'S			

Oak Hollow Zone 1									
Winterhaven (50%)	Platted	17.90	112	6.23		112	44,600	61	89
Public Park	Platted	6.70	0	0.00	2.01	2	804	1	2
Eagle Summit (90%)	Platted	53.83	156	2.95		156	62,280	86	125
Church (Ravencrest)	Platted	3.40	0	0.00	9.18	9	3,672	5	7
Woodhaven	Platted	56.90	167	2.93		167	66,800	92	131
Private Park	Platted	1.90	0	0.00	0.57	1	228	0	0
Private Park	Platted	0.40	0	0.00	0.12	0	48	0	0
Church (Chapel Ridge)	Platted	4.70	0	0.00	12.69	13	5,076	7	10
Vista Ridge	Platted	53.20	125	2.35		125	50,000	69	100
Private Park	Platted	0.30	0	0.00	0.09	0	36	0	0
Private Park	Platted	0.20	0	0.00	0.06	0	24	0	0
Private Park	Platted	0.70	0	0.00	0.06	0	24	0	0
Private Park	Platted	0.20	0	0.00	0.06	0	24	0	0
Chappel Ridge (25%)	Platted	7.60	25	3.32		25	10,100	14	20
Private Park	Platted	0.30	0	0.00	0.09	0	36	0	0
Hunter Chase (50%)	Platted	10.55	47	4.45		47	18,800	26	38
Private Park (50%)	Platted	0.20	0	0.00	0.06	0	24	0	0
Non Canyon A	Non Canyon	8.10	24	2.96		24	9,600	13	19
Non Canyon C	Non Canyon	3.30	6	1.82		6	2,400	3	5
Non-Canyon D	Non Canyon	0.60	3	5.00		3	1,200	2	2
Riverbend A	Riverbend	9.80	51	5.20		51	20,400	28	41
Riverbend B (70%)	Riverbend	10.15	123	12.14		123	49,280	68	99
Private Park	Perry Homes	10.00	0	0.00	3.00	3	1,200	2	2
Perry A1 (70%)	Perry Homes	23.03	91	3.95		91	36,400	50	73
Perry A2 - Park	Perry Homes	2.00	0	0.00	0.60	1	240	0	0
Perry B1	Perry Homes	25.40	120	4.72		120	48,000	66	96
Perry B2	Perry Homes	3.00	0	0.00	0.90	1	360	0	1
Perry C (50%)	Perry Homes	34.85	229	6.57		229	91,600	126	183
Total Oak Hollow Zone 1		347.71	1279	3.68	29	1,308	523,256	719	1,047

Commercial ERU = 2.7 x Acres
 School ERU = 2.7 x Acres
 Church ERU = 2.7 x Acres
 Parks ERU = 0.3 x Acres

TRAVERSE MOUNTAIN AREA PLAN										
CULINARY WATER SYSTEM REQUIREMENTS										
TANK ZONE SUMMARY										
Description	Area	Total Area	Total Density	Units per acre	Commercial / Parks	Total	Storage Requirement	Peak Day	Peak Hour	
						ERU's	ERU's	Gallons	GPM	GPM
Oak Hollow Zone 2										
Winterhaven (50%)	Platted	17.90	112	6.23		112	44,600	61	89	
Church (Traverse Mtn)	Platted	5.00	0	0.00	13.50	14	5,400	7	11	
Eagle Summit (10%)	Platted	52.83	156	2.95		156	62,280	86	125	
Private Park	Platted	1.30	0	0.00	0.39	0	156	0	0	
Shadow Ridge	Platted	45.00	201	4.47		201	89,400	111	161	
School	Platted	7.90	0	0.00	21.33	21	8,532	12	17	
Public Park	Platted	1.70	0	0.00	0.51	1	204	0	0	
Country Run	Platted	28.70	113	3.94		113	45,200	62	90	
Private Park	Platted	0.20	0	0.00	0.06	0	24	0	0	
Chappel Ridge (75%)	Platted	22.80	76	3.32		76	30,800	42	61	
Private Park	Platted	0.20	0	0.00	0.06	0	24	0	0	
Church (Fox tail)	Platted	5.10	0	0.00	13.77	14	5,508	8	11	
Harvest Homes	Platted	21.50	99	4.60		99	19,600	54	79	
Private Park	Platted	2.50	0	0.00	0.75	1	300	0	1	
Detention	Platted	2.10	0	0.00	0.63	1	252	0	1	
Cresthaven Townhomes	Platted	12.20	122	10.00		122	48,800	67	98	
Private Park	Platted	0.30	0	0.00	0.09	0	36	0	0	
Cresthaven Apartments	Platted	17.00	344	20.24		344.00	137,600	189	275	
Private Park	Platted	1.50	0	0.00	0.45	0.45	180	0	0	
Hunter Chase (50%)	Platted	10.55	47	4.45		47.00	18,800	26	38	
Private Park (50%)	Platted	0.20	0	0.00	0.06	0.06	24	0	0	
Heathermore	Platted	26.60	99	4.81		99.00	39,600	54	79	
Charter School	Platted	4.00	0	0.00	10.80	10.80	4,320	6	9	
TM Sales Center	Platted	2.00	0	0.00	5.40	5.40	2,160	3	4	
Non Canyon B	Non Canyon	6.50	66	10.15		66.00	26,400	36	53	
Perry A1 (30%)	Perry Homes	9.87	39	3.95		39.00	15,600	21	31	
Perry C (50%)	Perry Homes	34.85	229	6.57		229.00	91,600	126	183	
Perry D	Perry Homes	25.60	260	10.16		260.00	104,000	143	208	
HC	Commercial	1.80		0.00	4.86	4.86	1,944	3	4	
HC	Commercial	3.10		0.00	8.37	8.37	3,348	5	7	
Highway Commercial (70%)	Commercial	79.80		0.00	215.46	215.46	86,184	119	172	
Highway Commercial/HDR	Commercial	27.30	546	20.00		546.00	218,400	300	437	
Total Oak Hollow Zone 2		471.90	2508	5.31	296	2,804	1,121,776	1,542	2,244	
Oak Hollow Zone 3										
Cabellas	Platted	31.70		0.00	85.59	85.59	34,236	47	68	
Traverse Outlets	Platted	35.50		0.00	95.85	95.85	38,340	53	77	
Public Park	Commercial	9.60		0.00	2.88	2.88	1,152	2	2	
Highway Commercial	Commercial	9.40		0.00	25.38	25.38	10,152	14	20	
Highway Commercial	Commercial	7.30		0.00	19.71	19.71	7,884	11	16	
Highway Commercial	Commercial	7.80		0.00	21.06	21.06	8,424	12	17	
Highway Commercial	Commercial	6.70		0.00	18.09	18.09	7,236	10	14	
Highway Commercial	Commercial	5.00		0.00	13.50	13.50	5,400	7	11	
Highway Commercial	Commercial	2.50		0.00	6.75	6.75	2,700	4	5	
Highway Commercial	Commercial	14.80		0.00	39.96	39.96	15,984	22	32	
Highway Commercial	Commercial	34.38		0.00	92.83	92.83	37,130	51	74	
Total Oak Hollow Zone 3		164.68	0	0.00	422	422	168,638	232	337	





TRAVERSE MOUNTAIN AREA PLAN

CULINARY WATER DESIGN CRITERIA

SCENARIO 1: PHF WITH SPRINKLERS

- Tanks 1/3 Full, Pumps Off
- 0.8 GPM/ERU
- 500 GPM Fire Sprinklers
- Minimum Pressure 50 psi

October 12, 2011

WAT-13

WAT-13

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Scenario Summary Report

Scenario: Scenario - 1

Scenario Summary		
ID:	1651	
Label:	Scenario - 1	
Notes:		
Active Topology:	<1> Base Active Topology	
Physical:	<1> Base Physical	
Demand:	<1> Base Demand	
Initial Settings:	<1> Base Initial Settings	
Operational:	<1> Base Operational	
Age:	<1> Base Age	
Constituent:	<1> Base Constituent	
Trace:	<1> Base Trace	
Fire Flow:	Base Fire Flow	
Flushing:	<1> Base Flushing	
Energy Cost:	<1> Base Energy Cost	
Transient:	<1> Base Transient	
Pressure Dependent Demand:	<1> Base Pressure Dependent Demand	
Failure History:	<1> Base Failure History	
User Data Extensions:	<1> Base User Data Extensions	
Steady State/EPSS Solver Calculation Options:	<1> Base Calculation Options	
Transient Solver Calculation Options:	<1> Base Calculation Options	
Hydraulic Summary		
Time Analysis Type:	Steady State	
Friction Method:	Hazen-Williams	
Accuracy:	0.001	
Trials:	40	
	Use simple controls during steady state?	True
	Is EPS Snapshot?	False
	Start Time	12:00:00 AM
	Calculation Type	Fire Flow

CULINARY WATER

FIRE FLOW

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Fire Flow Node FlexTable: Fire Flow Report (traversewater.wtg)

Current Time: 0.000 hours

Label	Satisfies Fire Flow Constraints?	Fire Flow (Available) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (Zone)	Pressure (Calculated System Lower Limit) (psi)
100	True	3,000.00	3,011.20	60.9	15.9	J-114	15.9
102	False	0.00	11.20	42.9	15.9	J-114	15.9
106	True	1,859.11	1,859.11	50.0	15.9	J-114	15.9
108	False	0.00	0.00	40.6	15.9	J-114	15.9
110	True	3,000.00	3,012.80	64.4	15.9	J-114	15.9
112	True	3,000.00	3,012.80	67.4	15.9	J-114	15.9
114	True	3,000.00	3,012.80	53.9	15.9	J-114	15.9
116	True	1,003.35	1,018.55	50.0	15.9	J-114	15.9
118	True	1,740.69	1,753.49	50.0	15.9	J-114	15.9
124	True	3,000.00	3,000.00	85.6	15.9	J-114	15.9
126	True	3,000.00	3,000.00	97.0	15.9	J-114	15.9
132	True	3,000.00	3,000.00	67.8	15.9	J-114	15.9
138	True	1,819.08	1,842.09	50.0	15.9	J-114	15.9
140	True	3,000.00	3,012.00	60.3	15.9	J-114	15.9
142	True	3,000.00	3,000.00	70.4	15.9	J-114	15.9
144	True	1,727.42	1,740.22	50.0	15.9	J-114	15.9
146	True	1,185.27	1,198.07	50.0	15.9	J-114	15.9
148	True	947.24	964.04	50.0	15.9	J-114	15.9
150	True	3,000.00	3,000.00	73.8	15.9	J-114	15.9
152	True	3,000.00	3,000.00	70.3	15.9	J-114	15.9
154	True	2,821.71	2,833.71	50.0	15.9	J-114	15.9
156	True	2,248.20	2,264.20	50.0	15.9	J-114	15.9
158	True	2,654.53	2,665.73	50.0	15.9	J-114	15.9
160	True	3,000.00	3,000.00	79.5	15.9	J-114	15.9
164	True	1,710.82	1,710.82	50.0	15.9	J-114	15.9
166	True	2,733.70	2,733.70	50.0	15.9	J-114	15.9
168	True	3,000.00	3,000.00	62.5	15.9	J-114	15.9
170	True	3,000.00	3,000.00	72.9	15.9	J-114	15.9

Bentley WaterCAD V8i (SELECTseries 3)
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27 Shennock Company Drive Suite 200 W. Watertown, CT 06795 USA
+1-203-755-1666

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Fire Flow Node FlexTable: Fire Flow Report (traversewater.wtg)

Current Time: 0.000 hours

Label	Satisfies Fire Flow Constraints?	Fire Flow (Available) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (Zone)	Pressure (Calculated System Lower Limit) (psi)
172	True	3,000.00	3,013.60	79.6	15.9	J-114	15.9
174	True	3,000.00	3,052.80	95.6	15.9	J-114	15.9
176	True	3,000.00	3,011.20	104.2	15.9	J-114	15.9
178	True	3,000.00	3,000.00	70.8	15.9	J-114	15.9
184	False	0.00	0.00	49.9	15.9	J-114	15.9
186	True	3,000.00	3,000.00	85.6	15.9	J-114	15.9
190	True	1,958.78	1,964.38	50.0	15.9	J-114	15.9
194	True	3,000.00	3,000.00	61.4	15.9	J-114	15.9
196	True	3,000.00	3,000.00	69.0	15.9	J-114	15.9
198	True	3,000.00	3,120.00	61.3	15.9	J-114	15.9
200	True	1,584.68	1,584.68	50.0	15.9	J-114	15.9
202	True	1,296.15	1,300.15	50.0	15.9	J-114	15.9
204	True	1,251.74	1,254.94	50.0	15.9	J-114	15.9
206	False	0.00	0.00	35.6	15.9	J-114	15.9
208	False	0.00	0.00	45.3	15.9	J-114	15.9
210	True	3,000.00	3,000.00	87.3	15.9	J-114	15.9
212	True	3,000.00	3,000.00	59.6	15.9	J-114	15.9
214	True	1,955.89	1,968.69	50.0	15.9	J-114	15.9
216	True	1,358.62	1,371.42	50.0	15.9	J-114	15.9
218	True	2,326.65	2,326.65	50.0	15.9	J-114	15.9
220	True	2,824.92	2,837.72	50.0	15.9	J-114	15.9
222	True	3,000.00	3,013.60	61.3	15.9	J-114	15.9
224	True	295.75	302.95	50.0	15.9	J-114	15.9
226	True	1,901.05	1,908.25	50.0	15.9	J-114	15.9
228	True	1,092.31	1,097.91	50.0	15.9	J-114	15.9
232	True	3,000.00	3,000.00	70.4	15.9	J-114	15.9
234	True	1,295.74	1,299.74	50.0	15.9	J-114	15.9
236	True	1,142.66	1,149.86	50.0	15.9	J-114	15.9

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27 Siemon Company Drive Suite 200 W. Watertown, CT 06795 USA
+1-203-756-1566

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Fire Flow Node FlexTable: Fire Flow Report (traversewater.wtg)

Current Time: 0.000 hours

Label	Satisfies Fire Flow Constraints?	Fire Flow (Available) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (Zone)	Pressure (Calculated System Lower Limit) (psi)
238	True	1,007.81	1,015.01	50.0	15.9	J-114	15.9
240	True	1,380.20	1,387.40	50.0	15.9	J-114	15.9
242	True	1,725.00	1,734.55	50.0	15.9	J-114	15.9
244	True	1,320.96	1,324.96	50.0	15.9	J-114	15.9
246	True	1,592.60	1,603.00	50.0	15.9	J-114	15.9
250	True	1,496.85	1,499.25	50.0	15.9	J-114	15.9
252	True	1,089.85	1,076.25	50.0	15.9	J-114	15.9
254	True	1,460.92	1,468.92	50.0	15.9	J-114	15.9
256	True	1,698.10	1,702.10	50.0	15.9	J-114	15.9
258	True	3,000.00	3,023.20	85.1	15.9	J-114	15.9
260	True	1,216.22	1,224.22	50.0	15.9	J-114	15.9
262	True	2,509.54	2,518.34	50.0	15.9	J-114	15.9
266	True	491.04	499.84	50.0	15.9	J-114	15.9
268	True	475.83	455.83	50.0	15.9	J-114	15.9
270	True	2,125.66	2,125.66	50.0	15.9	J-114	15.9
276	True	2,116.61	2,116.61	50.0	15.9	J-114	15.9
278	True	1,935.28	1,948.08	50.0	15.9	J-114	15.9
280	True	1,114.68	1,114.68	50.0	15.9	J-114	15.9
282	True	3,000.00	3,047.04	51.9	15.6	J-114	15.6
284	True	3,000.00	3,047.04	65.3	15.6	J-114	15.6
8020	True	1,140.71	1,146.31	50.0	15.9	J-114	15.9
8022	True	726.76	736.76	50.0	15.9	J-114	15.9
8024	True	1,966.27	1,966.27	50.0	15.9	J-114	15.9
8026	True	2,478.29	2,478.29	50.0	15.9	J-114	15.9
8030	True	809.26	819.41	50.0	15.9	J-114	15.9
8032	True	377.77	377.77	50.0	15.9	J-114	15.9
8040	True	2,050.07	2,050.07	50.0	15.9	J-114	15.9
8050	True	3,000.00	3,000.00	81.2	15.9	J-114	15.9

Bentley WaterCAD V8i (SELECTseries 3i)
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27 Siemon Company Drive Suite 200 W. Watertown, CT 06795 USA
+1-203-755-1666

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Fire Flow Node FlexTable: Fire Flow Report (traversewater.wtg)

Current Time: 0.000 hours

Label	Satisfies Fire Flow Constraints?	Fire Flow (Available) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (Zone)	Pressure (Calculated System Lower Limit) (psi)
J-102	True	3,000.00	3,000.00	98.5	15.9	J-114	15.9
J-103	True	3,000.00	3,000.00	85.0	15.9	J-114	15.9
J-104	True	3,000.00	3,106.40	83.4	15.9	J-114	15.9
J-105	True	2,954.65	2,983.85	50.0	15.9	J-114	15.9
J-106	False	0.00	11.20	40.2	15.9	J-114	15.9
J-107	True	1,313.66	1,321.66	50.0	15.9	J-114	15.9
J-108	True	3,000.00	3,000.00	61.3	15.8	J-114	15.8
J-109	True	3,000.00	3,000.00	85.5	15.8	J-114	15.8
J-110	True	994.84	1,046.04	50.0	15.9	J-114	15.9
J-111	True	3,000.00	3,048.00	81.7	15.8	J-114	15.8
J-112	True	754.88	802.88	50.0	15.9	J-114	15.9
J-113	True	3,000.00	3,048.00	54.2	15.7	J-114	15.7
J-114	True	2,655.67	2,655.67	50.0	15.9	J-114	15.9
J-115	True	2,884.21	2,916.21	50.0	15.7	J-114	15.7
J-116	True	3,000.00	3,040.00	90.3	15.8	J-114	15.8
J-117	True	3,000.00	3,045.19	55.2	15.9	J-114	15.9
J-118	True	3,000.00	3,012.80	71.6	15.9	J-114	15.9
J-119	True	3,000.00	3,024.00	78.0	15.9	J-114	15.9
J-120	True	3,000.00	3,020.00	96.0	15.9	J-114	15.9
J-121	True	3,000.00	3,011.20	64.2	15.9	J-114	15.9
J-122	True	3,000.00	3,000.00	72.0	15.9	J-114	15.9
J-123	True	3,000.00	3,000.00	104.2	15.9	J-114	15.9
J-124	True	1,981.45	1,987.05	50.0	15.9	J-114	15.9
J-125	True	2,159.26	2,167.26	50.0	15.9	J-114	15.9
J-126	True	1,797.33	1,797.33	50.0	15.9	J-114	15.9
J-127	True	1,136.15	1,147.35	50.0	15.9	J-114	15.9
J-128	True	3,000.00	3,000.00	82.2	15.9	J-114	15.9
J-129	True	3,000.00	3,000.00	65.8	15.9	J-114	15.9

Bentley WaterCAD v8i (SELECTseries 3)
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27 Siemon Company Drive Suite 200 W Watertown, CT 06795 USA
+1-203-755-1666

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Fire Flow Node FlexTable: Fire Flow Report (traversewater.wtg)

Current Time: 0.000 hours

Label	Satisfies Fire Flow Constraints?	Fire Flow (Available) (gpm)	Flow (Total Available) (qpm)	Pressure (Calculated Residual) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (Zone)	Pressure (Calculated System Lower Limit) (psi)
J-221	True	3,000.00	3,006.70	102.4	15.9	J-114	15.9
J-225	True	3,000.00	3,106.88	83.3	15.9	J-114	15.9
J-229	True	3,000.00	3,000.00	75.7	15.9	J-114	15.9
J-230	True	3,000.00	3,017.60	73.1	15.9	J-114	15.9
J-236	True	3,000.00	3,011.20	61.2	15.9	J-114	15.9
J24	True	3,000.00	3,160.00	87.9	15.9	J-114	15.9
J-240	True	3,000.00	3,000.00	101.5	15.9	J-114	15.9
J-246	True	3,000.00	3,004.32	105.0	15.9	J-114	15.9
J-258	True	3,000.00	3,000.00	69.0	15.9	J-114	15.9
J26	True	3,000.00	3,104.00	85.3	15.9	J-114	15.9
J-270	True	3,000.00	3,029.48	88.0	15.9	J-114	15.9
J-273	True	3,000.00	3,029.48	77.2	15.9	J-114	15.9
J-274	True	3,000.00	3,000.00	99.4	15.9	J-114	15.9
J-275	True	3,000.00	3,000.00	68.3	15.9	J-114	15.9
J-276	True	3,000.00	3,000.00	108.9	15.9	J-114	15.9
J-277	True	3,000.00	3,061.89	100.5	15.9	J-114	15.9
J-278	True	3,000.00	3,000.00	91.1	15.9	J-114	15.9
J28	True	3,000.00	3,104.00	104.3	15.9	J-114	15.9
J-294	True	3,000.00	3,000.00	88.7	15.9	J-114	15.9
J-307	True	759.01	759.01	50.0	15.9	J-114	15.9
J-315	True	2,456.69	2,456.69	50.0	15.9	J-114	15.9
J-396	True	2,214.22	2,214.22	50.0	15.9	J-114	15.9
J-49	True	3,000.00	3,000.00	89.9	15.9	J-114	15.9
J-5	True	3,000.00	3,000.00	85.2	15.9	J-114	15.9
J-50	True	3,000.00	3,000.00	61.3	15.9	J-114	15.9
J-6	True	3,000.00	3,004.32	95.1	15.9	J-114	15.9
PRV-10-IN	True	3,000.00	3,000.00	106.2	15.9	J-114	15.9
PRV-25-IN	True	3,000.00	3,000.00	60.8	15.9	J-114	15.9

Bentley WaterCAD V8i (SELECTseries 3)
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 375 Simpson Company Drive Suite 200 W. Watertown, CT 06795 USA
 +1-203-755-1666

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Fire Flow Node FlexTable: Fire Flow Report (traversewater.wtg)

Current Time: 0.000 hours

Label	Satisfies Fire Flow Constraints?	Fire Flow (Available) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (Zone)	Pressure (Calculated System Lower Limit) (psi)
PRV-25-OUT	True	3,000.00	3,000.00	74.1	15.9	J-114	15.9
J-1	True	3,000.00	3,049.25	105.5	15.9	J-114	15.9
J-2	True	3,000.00	3,000.00	90.3	15.8	J-114	15.8
J-10	True	1,061.25	1,117.25	50.0	15.9	J-114	15.9
J-11	True	2,202.67	2,202.67	50.0	15.8	J-114	15.8
J-12	True	3,000.00	3,000.00	54.5	15.7	J-114	15.7
J-13	True	3,000.00	3,000.00	82.6	15.7	J-114	15.7
J-16	True	3,000.00	3,000.00	93.0	15.8	J-114	15.8
J-17	True	3,000.00	3,000.00	121.8	15.8	J-114	15.8
J-18	True	3,000.00	3,000.00	132.6	15.8	J-114	15.8
J-19	True	3,000.00	3,000.00	155.3	15.7	J-114	15.7
J-20	True	3,000.00	3,000.00	159.9	15.7	J-114	15.7
J-21	True	3,000.00	3,000.00	174.9	15.7	J-114	15.7
J-22	True	3,000.00	3,000.00	178.9	15.7	J-114	15.7
J-23	True	3,000.00	3,000.00	181.3	15.7	J-114	15.7
J-24	True	3,000.00	3,000.00	187.4	15.7	J-114	15.7
J-25	True	3,000.00	3,000.00	198.7	15.7	J-114	15.7
J-31	True	2,276.94	2,276.94	50.0	15.8	J-114	15.8
J-32	True	1,201.23	1,314.03	50.0	15.9	J-114	15.9
J-33	True	2,181.96	2,181.96	50.0	15.8	J-114	15.8
J-34	True	2,448.09	2,528.09	50.0	15.7	J-114	15.7
J-35	True	3,000.00	3,064.00	65.2	15.6	J-114	15.6
J-36	True	3,000.00	3,000.00	59.7	15.6	J-114	15.6
J-37	True	3,000.00	3,000.00	51.9	15.6	J-114	15.6
J-38	True	2,721.29	2,721.29	50.0	15.6	J-114	15.6
J-39	True	2,374.78	2,374.78	50.0	15.7	J-114	15.7
J-40	True	3,000.00	3,000.00	71.8	15.5	J-114	15.5
J-41	True	3,000.00	3,000.00	68.1	15.5	J-114	15.5

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27 Siemon Company Drive Suite 200 W. Watertown, CT 06795 USA
+1-203-755-1666

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Fire Flow Node FlexTable: Fire Flow Report (traversewater.wtg)

Current Time: 0.000 hours

Label	Satisfies Fire Flow Constraints?	Fire Flow (Available) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (Zone)	Pressure (Calculated System Lower Limit) (psi)
J-42	True	3,000.00	3,000.00	64.9	15.5	J-114	15.5
J-43	True	3,000.00	3,000.00	62.3	15.5	J-114	15.5
J-44	True	3,000.00	3,000.00	60.6	15.5	J-114	15.5
J-45	True	3,000.00	3,000.00	61.8	15.5	J-114	15.5
J-46	True	3,000.00	3,000.00	71.0	15.5	J-114	15.5
J-47	True	3,000.00	3,000.00	84.6	15.5	J-114	15.5
J-48	True	3,000.00	3,000.00	82.6	15.5	J-114	15.5
J-49	True	3,000.00	3,020.80	80.1	15.5	J-114	15.5
J-50	True	3,000.00	3,000.00	93.0	15.6	J-114	15.6
J-51	True	3,000.00	3,000.00	111.8	15.6	J-114	15.6
J-52	True	3,000.00	3,000.00	127.4	15.6	J-114	15.6
J-53	True	3,000.00	3,000.00	141.0	15.6	J-114	15.6
J-54	True	3,000.00	3,000.00	162.5	15.6	J-114	15.6
J-55	True	3,000.00	3,000.00	171.5	15.6	J-114	15.6
J-56	True	3,000.00	3,000.00	180.9	15.7	J-114	15.7
J-57	True	3,000.00	3,000.00	190.6	15.7	J-114	15.7
J-58	True	3,000.00	3,000.00	200.1	15.7	J-114	15.7
J-59	True	3,000.00	3,000.00	229.1	15.7	J-114	15.7
J-60	True	3,000.00	3,000.00	218.7	15.7	J-114	15.7
J-61	True	3,000.00	3,000.00	53.7	15.5	J-114	15.5
J-62	False	0.00	0.00	48.0	15.9	J-114	15.9
J-63	False	0.00	82.40	36.3	15.9	J-114	15.9
J-67	True	3,000.00	3,000.00	83.1	15.7	J-114	15.7
J-68	True	3,000.00	3,000.00	66.3	15.7	J-114	15.7
J-69	True	2,988.71	3,060.71	50.0	15.7	J-114	15.7
J-70	True	3,000.00	3,000.00	69.2	15.7	J-114	15.7
J-71	True	1,126.42	1,126.42	50.0	15.9	J-114	15.9
J-72	True	1,446.05	1,446.05	50.0	15.9	J-114	15.9

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Benlity Systems, Inc. Heald Method Solution Center
27 Siemon Company Drive Suite 100 W Watertown, CT 06795 USA
+1-203-755-1956

Benlity WaterCAD V8i (SE) E.C. Tables 3
[06.11.03.17]
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Fire Flow Node Flex Table: Fire Flow Report (traversewater.wtg)

Current Time: 0.000 hours

Label	Satisfies Fire Flow Constraints?	Fire Flow (Available) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (Zone)	Pressure (Calculated System Lower Limit) (psi)
J-73	True	2,359.28	2,359.28	50.0	15.8	J-114	15.8
J-74	True	2,636.10	2,636.10	50.0	15.8	J-114	15.8
J-75	True	3,060.80	3,060.80	64.7	15.7	J-114	15.7
J-80	False	0.00	0.00	45.6	15.9	J-114	15.9
J-81	True	171.63	245.55	50.0	15.9	J-114	15.9
J-82	False	0.00	0.00	28.7	15.9	J-114	15.9
J-83	False	0.00	0.00	39.7	15.9	J-114	15.9
J-84	False	0.00	0.00	41.7	15.9	J-114	15.9
J-85	False	0.00	0.00	43.3	15.9	J-114	15.9
J-86	True	1,131.39	1,131.39	50.0	15.9	J-114	15.9
J-87	True	2,252.71	2,252.71	50.0	15.9	J-114	15.9
J-88	True	3,000.00	3,000.00	56.0	15.9	J-114	15.9
J-89	False	0.00	110.40	49.2	15.9	J-114	15.9
J-90	False	0.00	0.00	41.9	15.9	J-114	15.9
J-94	True	1,596.13	1,603.90	50.0	15.9	J-114	15.9
J-95	True	1,605.39	1,605.39	50.0	15.9	J-114	15.9
J-96	True	1,593.22	1,625.22	50.0	15.9	J-114	15.9
J-102	True	3,000.00	3,000.00	88.0	15.9	J-114	15.9
J-103	True	3,000.00	3,000.00	81.6	15.8	J-114	15.8
J-104	True	3,000.00	3,000.00	85.6	15.8	J-114	15.8
J-105	True	3,000.00	3,000.00	88.9	15.8	J-114	15.8
J-106	True	3,000.00	3,000.00	92.0	15.8	J-114	15.8
J-107	True	3,000.00	3,000.00	95.9	15.8	J-114	15.8
J-108	True	3,000.00	3,000.00	95.7	15.8	J-114	15.8
J-110	True	3,000.00	3,000.00	90.9	15.7	J-114	15.7
J-112	True	3,000.00	3,024.00	72.8	15.9	J-114	15.9
J-113	True	3,000.00	3,000.00	75.2	15.7	J-114	15.7
J-114	False	0.00	0.00	15.9	28.7	J-82	28.7

Bentley WaterCAD v8i (SELECTseries 3)
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27 Siemon Company Drive Suite 200 W. Watertown, CT 06795 USA
+1-203-755-1666

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Fire Flow Node FlexTable: Fire Flow Report (traversewater.wtg)

Current Time: 0.000 hours

Label	Satisfies Fire Flow Constraints?	Fire Flow (Available) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (Zone)	Pressure (Calculated System Lower Limit) (psi)
J-115	False	0.00	0.00	39.3	15.9	J-114	15.9
J-117	True	3,000.00	3,012.80	86.4	15.9	J-114	15.9
J-119	True	3,000.00	3,012.80	85.4	15.9	J-114	15.9
J-120	True	3,000.00	3,012.80	61.9	15.9	J-114	15.9
J-121	True	3,000.00	3,012.80	66.3	15.9	J-114	15.9
J-122	True	3,000.00	3,012.80	77.0	15.9	J-114	15.9
J-123	True	3,000.00	3,013.60	85.1	15.9	J-114	15.9
J-125	True	3,000.00	3,012.80	79.5	15.9	J-114	15.9
J-126	True	3,000.00	3,013.93	73.7	15.9	J-114	15.9
J-127	True	3,000.00	3,013.60	76.3	15.9	J-114	15.9
J-128	True	1,503.12	1,527.12	50.0	15.9	J-114	15.9
J-129	False	0.00	15.20	48.0	15.9	J-114	15.9
J-130	True	2,029.57	2,037.57	50.0	15.9	J-114	15.9
J-131	True	2,800.77	2,813.57	50.0	15.9	J-114	15.9
J-132	True	2,012.77	2,025.57	50.0	15.9	J-114	15.9
J-133	True	1,685.51	1,699.31	50.0	15.9	J-114	15.9
J-134	True	1,859.24	1,872.04	50.0	15.9	J-114	15.9
J-135	True	1,486.79	1,499.59	50.0	15.9	J-114	15.9
J-136	True	1,444.05	1,456.85	50.0	15.9	J-114	15.9
J-137	True	3,000.00	3,012.00	50.6	15.9	J-114	15.9
J-138	False	0.00	11.20	47.8	15.9	J-114	15.9
J-139	True	1,834.20	1,844.60	50.0	15.9	J-114	15.9
J-140	True	1,337.52	1,348.72	50.0	15.9	J-114	15.9
J-142	True	489.45	465.05	50.0	15.9	J-114	15.9
J-143	True	81.55	87.15	50.0	15.9	J-114	15.9
J-144	True	1,307.24	1,312.84	50.0	15.9	J-114	15.9
J-145	True	1,367.01	1,372.61	50.0	15.9	J-114	15.9
J-146	True	2,072.05	2,077.65	50.0	15.9	J-114	15.9

Fire Flow Node FlexTable: Fire Flow Report (traversewater.wfg)

Current Time: 0.000 hours

Label	Satisfies Fire Flow Constraints?	Fire Flow (Available) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (Zone)	Pressure (Calculated System Lower Limit) (psi)
J-147	True	1,231.23	1,236.83	50.0	15.9	J-114	15.9
J-148	True	368.87	374.47	50.0	15.9	J-114	15.9
J-149	True	3,000.00	3,024.80	59.7	15.9	J-114	15.9
J-150	True	3,000.00	3,025.60	59.7	15.9	J-114	15.9
J-151	True	3,000.00	3,024.80	78.9	15.9	J-114	15.9
J-152	True	3,000.00	3,024.80	67.9	15.9	J-114	15.9
J-153	True	3,000.00	3,090.40	79.6	15.9	J-114	15.9
J-154	True	3,000.00	3,091.20	75.6	15.9	J-114	15.9
J-155	True	3,000.00	3,090.40	85.2	15.9	J-114	15.9
J-156	True	3,000.00	3,008.80	52.0	15.9	J-114	15.9
J-157	True	2,656.90	2,665.70	50.0	15.9	J-114	15.9
J-158	True	2,255.01	2,272.61	50.0	15.9	J-114	15.9
J-159	True	2,880.33	2,889.13	50.0	15.9	J-114	15.9
J-160	True	3,000.00	3,008.80	52.2	15.9	J-114	15.9
J-161	True	2,566.71	2,567.80	50.0	15.9	J-114	15.9
J-162	True	2,448.65	2,457.45	50.0	15.9	J-114	15.9
J-163	True	3,000.00	3,008.80	52.3	15.9	J-114	15.9
J-164	True	3,000.00	3,000.00	66.4	15.9	J-114	15.9
J-165	True	3,000.00	3,008.80	50.1	15.9	J-114	15.9
J-166	True	2,172.07	2,172.07	50.0	15.9	J-114	15.9
J-167	True	3,000.00	3,000.00	106.2	15.9	J-114	15.9
J-168	True	1,537.41	1,550.21	50.0	15.9	J-114	15.9
J-170	True	3,000.00	3,024.00	63.7	15.9	J-114	15.9
J-171	True	2,471.03	2,493.43	50.0	15.9	J-114	15.9
J-172	True	2,250.25	2,260.65	50.0	15.9	J-114	15.9
J-173	True	2,199.59	2,215.59	50.0	15.9	J-114	15.9
J-174	True	3,000.00	3,018.40	50.5	15.9	J-114	15.9
J-175	True	1,509.21	1,517.21	50.0	15.9	J-114	15.9

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Bentley Systems, Inc. Haestad Methods Solution Center
27 Semon Company Drive Suite 200 W. Watertown, CT 06795 USA
+1-203-755-1666

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Fire Flow Node FlexTable: Fire Flow Report (traversewater.wtg)

Current Time: 0.000 hours

Label	Satisfies Fire Flow Constraints?	Fire Flow (Available) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (Zone)	Pressure (Calculated System Lower Limit) (psi)
J-147	True	1,231.23	1,236.83	50.0	15.9	J-114	15.9
J-148	True	368.87	374.47	50.0	15.9	J-114	15.9
J-149	True	3,000.00	3,024.80	59.7	15.9	J-114	15.9
J-150	True	3,000.00	3,025.60	59.7	15.9	J-114	15.9
J-151	True	3,000.00	3,024.80	78.9	15.9	J-114	15.9
J-152	True	3,000.00	3,024.80	67.9	15.9	J-114	15.9
J-153	True	3,000.00	3,090.40	79.6	15.9	J-114	15.9
J-154	True	3,000.00	3,091.20	75.6	15.9	J-114	15.9
J-155	True	3,000.00	3,090.40	85.2	15.9	J-114	15.9
J-156	True	3,000.00	3,008.80	52.0	15.9	J-114	15.9
J-157	True	2,656.90	2,665.70	50.0	15.9	J-114	15.9
J-158	True	2,255.01	2,272.61	50.0	15.9	J-114	15.9
J-159	True	2,880.33	2,889.13	50.0	15.9	J-114	15.9
J-160	True	3,000.00	3,008.80	52.2	15.9	J-114	15.9
J-161	True	2,566.71	2,567.80	50.0	15.9	J-114	15.9
J-162	True	2,448.65	2,457.45	50.0	15.9	J-114	15.9
J-163	True	3,000.00	3,008.80	52.3	15.9	J-114	15.9
J-164	True	3,000.00	3,000.00	66.4	15.9	J-114	15.9
J-165	True	3,000.00	3,008.80	50.1	15.9	J-114	15.9
J-166	True	2,172.07	2,172.07	50.0	15.9	J-114	15.9
J-167	True	3,000.00	3,000.00	106.2	15.9	J-114	15.9
J-168	True	1,537.41	1,550.21	50.0	15.9	J-114	15.9
J-170	True	3,000.00	3,024.00	63.7	15.9	J-114	15.9
J-171	True	2,471.03	2,493.43	50.0	15.9	J-114	15.9
J-172	True	2,250.25	2,260.65	50.0	15.9	J-114	15.9
J-173	True	2,199.59	2,215.59	50.0	15.9	J-114	15.9
J-174	True	3,000.00	3,018.40	50.5	15.9	J-114	15.9
J-175	True	1,509.21	1,517.21	50.0	15.9	J-114	15.9

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27 Sherman Company Drive, Suite 200 W. Watertown, CT 06795 USA
+1-203-755-1555

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Fire Flow Node FlexTable: Fire Flow Report (traversewater.wtg)

Current Time: 0.000 hours

Label	Satisfies Fire Flow Constraints?	Fire Flow (Available) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (Zone)	Pressure (Calculated System Lower Limit) (psi)
J-176	True	3,000.00	3,009.60	87.0	15.9	J-114	15.9
J-177	True	3,000.00	3,003.89	54.9	15.9	J-114	15.9
J-178	True	3,000.00	3,020.00	51.8	15.9	J-114	15.9
J-179	True	3,000.00	3,009.07	98.1	15.9	J-114	15.9
J-180	True	3,000.00	3,000.00	84.8	15.9	J-114	15.9
J-181	True	3,000.00	3,000.00	85.9	15.9	J-114	15.9
J-182	True	3,000.00	3,000.00	71.8	15.9	J-114	15.9
J-183	True	3,000.00	3,061.88	83.1	15.9	J-114	15.9
J-184	True	3,000.00	3,061.89	68.4	15.9	J-114	15.9
J-185	True	2,470.41	2,470.41	50.0	15.9	J-114	15.9
J-186	True	1,900.90	1,900.90	50.0	15.9	J-114	15.9
J-188	True	3,000.00	3,000.00	50.8	15.9	J-114	15.9
J-189	True	1,131.89	1,131.89	50.0	15.9	J-114	15.9
J-190	True	1,542.53	1,542.53	50.0	15.9	J-114	15.9
J-191	True	3,000.00	3,000.00	53.8	15.9	J-114	15.9
J-192	True	2,898.84	2,898.84	50.0	15.9	J-114	15.9
J-193	True	3,000.00	3,000.00	70.4	15.9	J-114	15.9
J-194	True	2,854.87	2,916.75	50.0	15.9	J-114	15.9
J-195	True	3,000.00	3,000.00	64.9	15.9	J-114	15.9
J-196	True	3,000.00	3,002.30	62.8	15.9	J-114	15.9
J-197	True	3,000.00	3,020.30	52.7	15.9	J-114	15.9
J-198	True	3,000.00	3,015.77	58.4	15.9	J-114	15.9
J-199	True	3,000.00	3,014.47	61.6	15.9	J-114	15.9
J-200	True	1,866.62	1,866.62	50.0	15.9	J-114	15.9
J-201	True	1,706.61	1,719.41	50.0	15.9	J-114	15.9
J-202	True	1,684.47	1,694.87	50.0	15.9	J-114	15.9
J-203	True	1,444.02	1,455.22	50.0	15.9	J-114	15.9
J-204	True	1,445.62	1,456.82	50.0	15.9	J-114	15.9

Bentley WaterCAD V8i (SELECTseries 3)
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27 Siemon Company Drive Suite 200 W. Watertown, CT 06795 USA
+1-203-755-1666

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Fire Flow Node FlexTable: Fire Flow Report (traversewater.wtg)

Current Time: 0.000 hours

Label	Satisfies Fire Flow Constraints?	Fire Flow (Available) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (Zone)	Pressure (Calculated System Lower Limit) (psi)
J-205	True	1,478.90	1,490.10	50.0	15.9	J-114	15.9
J-206	True	1,452.97	1,464.17	50.0	15.9	J-114	15.9
J-207	True	3,000.00	3,000.00	81.2	15.9	J-114	15.9
J-208	True	3,000.00	3,000.00	74.3	15.9	J-114	15.9
J-209	True	3,000.00	3,031.97	66.9	15.9	J-114	15.9
J-210	True	3,000.00	3,005.40	62.0	15.9	J-114	15.9
J-211	True	3,000.00	3,008.80	103.7	15.9	J-114	15.9
J-212	True	2,911.39	2,928.24	50.0	15.9	J-114	15.9
J-213	True	3,000.00	3,020.80	108.9	15.9	J-114	15.9
J-214	True	1,210.71	1,229.91	50.0	15.9	J-114	15.9
J-215	True	1,249.26	1,249.26	50.0	15.9	J-114	15.9
J-216	True	3,000.00	3,000.00	69.8	15.9	J-114	15.9
J-217	True	3,000.00	3,000.00	80.4	15.9	J-114	15.9
J-218	True	3,000.00	3,000.00	63.3	15.9	J-114	15.9
J-219	True	3,000.00	3,000.00	65.7	15.9	J-114	15.9
J-220	True	3,000.00	3,068.47	66.5	15.9	J-114	15.9
J-221	True	3,000.00	3,010.80	61.5	15.9	J-114	15.9
J-222	True	3,000.00	3,076.68	62.8	15.9	J-114	15.9
J-224	False	0.00	140.80	36.5	15.9	J-114	15.9
J-225	True	1,374.60	1,419.40	50.0	15.8	J-114	15.8
J-226	True	2,017.88	2,101.88	50.0	15.7	J-114	15.7
J-227	True	3,000.00	3,107.20	56.9	15.5	J-114	15.5
J-228	True	3,000.00	3,000.00	163.9	15.7	J-114	15.7
J-229	True	3,000.00	3,068.80	55.5	15.7	J-114	15.7
J-230	True	1,554.35	1,554.35	50.0	15.9	J-114	15.9
J-231	True	2,153.26	2,200.46	50.0	15.8	J-114	15.8
J-232	True	2,250.78	2,276.38	50.0	15.8	J-114	15.8
J-233	True	2,867.41	2,934.61	50.0	15.7	J-114	15.7

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275 Stoneman Company Drive Suite 200 W. Watertown, CT 06795 USA
+1-203-755-1656

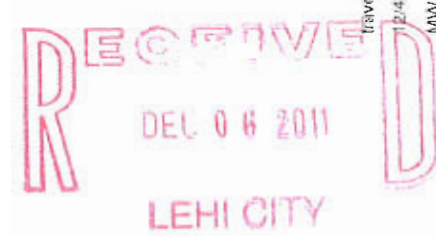
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Fire Flow Node FlexTable: Fire Flow Report (traversewater.wtg)

Current Time: 0.000 hours

Label	Satisfies Fire Flow Constraints?	Fire Flow (Available) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (Zone)	Pressure (Calculated System Lower Limit) (psi)
J-234	True	2,461.45	2,497.45	50.0	15.8	J-114	15.8
J-235	True	1,461.63	1,493.63	50.0	15.9	J-114	15.9
J-237	True	538.33	587.93	50.0	15.9	J-114	15.9
J-238	True	1,157.73	1,187.33	50.0	15.9	J-114	15.9
J-239	True	1,925.37	1,925.37	50.0	15.8	J-114	15.8
J-240	True	2,639.05	2,639.05	50.0	15.7	J-114	15.7
J-241	True	3,000.00	3,000.00	95.6	15.7	J-114	15.7
J-242	True	2,615.80	2,723.80	50.0	15.9	J-114	15.9
J-243	True	1,405.52	1,762.27	50.0	15.9	J-114	15.9
J-244	True	2,692.99	2,872.99	50.0	15.9	J-114	15.9

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27 Siemon Company Drive Suite 200 W. Watertown, CT 06795 USA
+1-203-735-1666

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TRAVERSE MOUNTAIN AREA PLAN

CULINARY WATER DESIGN CRITERIA

SCENARIO 2: PIF

- Tanks 1/3 Full, Pumps Off
- 1.0 GPM/ERU
- Minimum Pressure 40 psi

October 12, 2011

Scenario Summary Report

Scenario: Scenario - 1

Scenario Summary	
ID	1651
Label	Scenario - 1
Notes	
Active Topology	<1> Base Active Topology
Physical Demand	<1> Base Physical Demand
Initial Settings	<1> Base Initial Settings
Operational	<1> Base Operational
Age	<1> Base Age
Constituent	<1> Base Constituent
Trace	<1> Base Trace
Fire Flow	Base Fire Flow
Flushing	<1> Base Flushing
Energy Cost	<1> Base Energy Cost
Transient	<1> Base Transient
Pressure Dependent Demand	<1> Base Pressure Dependent Demand
Failure History	<1> Base Failure History
User Data Extensions	<1> Base User Data Extensions
Steady State/EPS Solver Calculation Options	<1> Base Calculation Options
Transient Solver Calculation Options	<1> Base Calculation Options

Hydraulic Summary		
Time Analysis Type	Steady State	
Friction Method	Hazen-Williams	
Accuracy	0.001	
Trials	40	
	Use simple controls during steady state?	True
	Is EPS Snapshot?	False
	Start Time	12:00:00 AM
	Calculation Type	Hydraulics Only



**CULINARY WATER
TANK TABLE**

FlexTable: Tank Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Elevation (Minimum) (ft)	Elevation (Initial) (ft)	Elevation (Maximum) (ft)	Diameter (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
Vialletto	5,600.00	5,607.00	5,620.00	200.00	4,954.16	5,607.00
Oak Hollow	5,190.00	5,197.00	5,210.00	105.00	495.62	5,197.00
West Canyon	5,600.00	5,607.00	5,620.00	80.00	1,909.97	5,607.00
Flight Park	5,060.00	5,070.00	5,080.00	100.00	-333.03	5,070.00

WAT-33



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27 Siemon Company Drive Suite 200 W. Watertown, CT 06795 USA
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CULINARY WATER

PRV TABLE

FlexTable: PRV Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Diameter (Valve) (in)	Elevation (ft)	Hydraulic Grade Setting (Initial) (ft)	Hydraulic Grade Setting (Calculated) (ft)	Pressure Setting (Initial) (psi)	Pressure (To) (psi)	Flow (gpm)
Cay-21	8.0	5,356.80	5,520.84	5,520.96	71.0	71.0	353.55
Cay-22	6.0	5,323.34	5,519.73	5,519.87	85.0	85.0	225.79
Cay-23	6.0	5,298.00	5,519.81	5,519.96	96.0	96.0	262.00
Cay-24	8.0	5,348.29	5,519.27	5,519.39	74.0	74.0	246.68
Cay-31	6.0	5,219.53	5,335.05	5,335.13	50.0	50.0	219.55
Cay-32	6.0	5,200.42	5,334.42	5,334.52	58.0	58.0	145.58
Cay-33	6.0	5,225.88	5,334.47	5,334.55	47.0	47.0	221.79
Cay-34	8.0	5,220.00	5,333.21	5,333.29	49.0	49.0	186.68
Caye-21	6.0	5,302.29	5,413.19	5,413.27	48.0	48.0	307.40
Caye-22	8.0	5,320.00	5,410.11	5,410.17	39.0	39.0	3,178.67
Caye-23	6.0	5,300.00	5,410.90	5,410.98	48.0	48.0	1,304.46
Caye-31	8.0	5,267.18	5,341.12	5,341.17	32.0	32.0	2,571.53
Caye-32	6.0	5,267.00	5,340.94	5,340.99	32.0	32.0	1,902.91
Oak-11	8.0	5,030.00	5,226.39	5,226.53	85.0	85.0	3,893.50
Oak-21	6.0	4,945.00	5,079.01	5,079.10	58.0	58.0	482.18
Oak-22	8.0	4,910.00	5,070.58	5,070.69	69.5	69.5	63.66
Oak-23	6.0	4,940.00	5,070.77	5,070.87	56.6	56.6	26.81
Oak-24	6.0	4,940.74	5,079.37	5,079.47	60.0	60.0	562.87
Oak-25	10.0	4,934.23	5,079.79	5,079.89	63.0	63.0	1,269.73
Oak-26	10.0	4,938.39	5,079.33	5,079.43	61.0	61.0	498.21
Oak-27	10.0	4,921.33	5,078.44	5,078.55	68.0	68.0	56.68
Oak-31	8.0	4,785.13	4,930.70	4,930.80	63.0	63.0	99.77
Oak-32	8.0	4,805.00	4,930.46	4,930.55	54.3	54.3	61.61
Oak-33	8.0	4,789.00	4,930.63	4,930.73	61.3	61.3	234.85
Oak-34	8.0	4,801.00	4,930.62	4,930.71	56.1	56.1	88.19



CULINARY WATER

PIPE TABLE

FlexTable: Pipe Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Start Node	Stop Node	Diameter (in)	Hazen-Williams C	Has Check Valve?	Flow (Maximum) (gpm)	Velocity (ft/s)
PRV-101	PRV-10-IN	Oak-33	12.0	150.0	False	234.85	0.67
PRV-251	PRV-25-IN	Oak-23	10.0	150.0	False	-26.81	0.11
PRV-252	Oak-23	PRV-25-OUT	10.0	150.0	False	-26.81	0.11
297	8020	8022	6.0	130.0	False	-114.40	1.30
357	8058	186	12.0	130.0	False	1,267.70	3.60
161	102	206	14.0	130.0	False	-1,072.22	2.23
141	194	198	12.0	130.0	False	877.14	2.49
287	8022	184	6.0	130.0	False	-114.40	1.30
189	232	212	6.0	130.0	False	-197.37	2.24
301	8030	8032	6.0	130.0	False	-111.38	1.26
P107	164	Oak-32	10.0	130.0	False	61.61	0.25
145	196	J-218	12.0	130.0	False	727.14	2.06
355	198	196	12.0	130.0	False	727.14	2.06
331	8024	8026	12.0	130.0	False	-1,286.75	3.65
81	152	J-258	12.0	130.0	False	-516.84	1.47
119	178	110	6.0	130.0	False	105.03	1.19
41	112	110	6.0	130.0	False	-89.03	1.01
29	8032	208	6.0	130.0	False	-111.38	1.26
47	J-225	124	12.0	130.0	False	-436.57	1.24
P367	Caye-21	J-307	6.0	130.0	False	307.40	3.49
211	250	246	6.0	130.0	False	-8.00	0.09
P319	178	PRV-25-OUT	10.0	130.0	False	26.81	0.11
87	160	J-225	12.0	130.0	False	-302.97	0.86
21	J-206	J-200	10.0	130.0	False	550.85	2.25
113	J-207	176	12.0	130.0	False	-161.14	0.46
165	J-207	210	6.0	130.0	False	-271.66	3.08
69	J-275	142	12.0	130.0	False	-648.38	1.84
167	210	232	6.0	130.0	False	-113.86	1.29
333	8040	230	6.0	130.0	False	83.52	0.95



FlexTable: Pipe Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Start Node	Stop Node	Diameter (in)	Hazen-Williams C	Has Check Valve?	Flow (Maximum) (gpm)	Velocity (ft/s)
157	204	202	6.0	130.0	False	-4.00	0.05
P241	J138	J-396	12.0	130.0	False	4,825.53	13.69
P247	J-396	J104	12.0	130.0	False	3,510.07	9.96
61	J-258	132	12.0	130.0	False	-516.84	1.47
73	142	140	8.0	130.0	False	-504.10	3.22
P-217	J-214	106	6.0	130.0	False	-18.29	0.21
103	150	170	12.0	130.0	False	-367.40	1.04
131	J-210	190	6.0	130.0	False	-110.50	1.25
P-251	J-246	PRV-10-IN	12.0	130.0	False	234.85	0.67
75	144	146	6.0	130.0	False	-26.08	0.30
225	254	260	8.0	130.0	False	-447.83	2.86
133	J-270	186	12.0	130.0	False	-535.07	1.52
221	J-203	258	14.0	130.0	False	1,013.20	2.11
175	218	220	6.0	130.0	False	259.46	2.94
219	254	256	6.0	130.0	False	-19.58	0.22
P353	J128	J148	10.0	130.0	False	296.68	1.21
P-245	J-236	J-205	6.0	130.0	False	194.51	2.21
39	J-200	112	6.0	130.0	False	50.55	0.57
P239	J118	J138	12.0	130.0	False	-128.63	0.36
201	236	240	6.0	130.0	False	-18.00	0.20
101	168	166	6.0	130.0	False	57.06	0.65
299	J-214	8030	6.0	130.0	False	-98.69	1.12
235	266	268	6.0	130.0	False	-207.62	2.36
P195	J116	J-396	8.0	130.0	False	-1,315.46	8.40
P-53	ORR-33	J-50	12.0	130.0	False	234.85	0.67
349	186	8050	12.0	130.0	False	288.04	0.82
217	256	242	6.0	130.0	False	-47.58	0.48
177	212	220	6.0	130.0	False	-197.37	2.24
83	144	150	6.0	130.0	False	10.08	0.11

FlexTable: Pipe Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Start Node	Stop Node	Diameter (in)	Hazen-Williams C	Has Check Valve?	Flow (Maximum) (gpm)	Velocity (ft/s)
351	J-274	8052	12.0	130.0	False	203.32	0.58
23	J-215	102	6.0	130.0	False	-106.67	1.21
P221	J134	J136	8.0	130.0	False	126.68	0.81
107	174	J-240	12.0	130.0	False	204.83	0.58
P-238	J-206	178	8.0	130.0	False	131.84	0.84
185	224	226	6.0	130.0	False	-9.00	0.10
205	244	250	6.0	130.0	False	-5.00	0.06
197	236	238	6.0	130.0	False	4.29	0.05
199	238	236	6.0	130.0	False	-4.71	0.05
159	208	108	12.0	130.0	False	-1,183.60	3.36
227	262	258	8.0	130.0	False	-559.50	3.57
P-288	J-278	J-221	12.0	130.0	False	1,057.51	3.00
247	276	270	8.0	130.0	False	24.76	0.16
P-283	170	152	12.0	130.0	False	-484.95	1.38
P-277	J-277	J-276	12.0	130.0	False	13.66	0.04
P-257	J-203	100	14.0	130.0	False	-841.69	1.75
85	148	152	6.0	130.0	False	-63.08	0.72
P-204	258	J-204	14.0	130.0	False	424.70	0.89
181	222	220	6.0	130.0	False	-46.08	0.52
203	240	242	6.0	130.0	False	-32.00	0.36
191	232	8040	6.0	130.0	False	83.52	0.95
P-205	J-204	J-205	10.0	130.0	False	310.04	1.27
79	J-229	150	12.0	130.0	False	-377.48	1.07
127	190	8020	6.0	130.0	False	58.52	0.66
155	202	200	6.0	130.0	False	-9.00	0.10
11	100	J-236	8.0	130.0	False	97.30	0.62
P-287	142	160	12.0	130.0	False	-207.80	0.59
P-301	J-315	Caye-21	8.0	130.0	False	307.40	1.96
53	118	116	6.0	130.0	False	19.00	0.22



FlexTable: Pipe Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Start Node	Stop Node	Diameter (in)	Hazen-Williams C	Has Check Valve?	Flow (Maximum) (gpm)	Velocity (ft/s)
P-282	J-230	J-294	12.0	130.0	False	100.18	0.28
P213	J126	J130	6.0	130.0	False	64.00	0.73
223	260	262	8.0	130.0	False	-348.52	2.22
93	160	156	8.0	130.0	False	20.00	0.13
171	214	216	6.0	130.0	False	-75.33	0.85
97	J-229	168	6.0	130.0	False	83.00	0.94
P207	J118	J125	12.0	130.0	False	118.63	0.34
P317	PRV-25-IN	J-279	10.0	130.0	False	26.81	0.11
49	124	126	12.0	130.0	False	-507.20	1.44
245	278	276	6.0	130.0	False	-28.17	0.32
P-206	J-205	J-206	10.0	130.0	False	490.56	2.00
89	114	154	10.0	130.0	False	591.87	2.42
P-279	J-294	174	12.0	130.0	False	344.64	0.98
239	270	254	8.0	130.0	False	-457.41	2.92
163	206	208	16.0	130.0	False	-1,072.22	1.71
35	J-200	114	10.0	130.0	False	484.30	1.98
P335	J104	J-315	12.0	130.0	False	3,486.07	9.89
55	126	J-246	12.0	130.0	False	-797.88	2.26
P-275	J-273	J-274	12.0	130.0	False	277.85	0.79
27	106	J-209	6.0	130.0	False	-210.42	2.39
P297	J126	J128	12.0	130.0	False	54.63	0.15
255	284	282	6.0	130.0	False	45.38	0.51
77	146	148	6.0	130.0	False	-42.08	0.48
193	230	226	6.0	130.0	False	76.52	0.87
37	114	112	6.0	130.0	False	-123.58	1.40
P29	J26	J28	12.0	130.0	False	-73.32	0.21
91	154	158	10.0	130.0	False	14.00	0.06
207	242	246	6.0	130.0	False	-86.52	0.98
P-75	J-1	J-49	10.0	130.0	False	-1.26	0.01

FlexTable: Pipe Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Start Node	Stop Node	Diameter (in)	Hazen-Williams C	Has Check Valve?	Flow (Maximum) (gpm)	Velocity (ft/s)
P-129	108	184	12.0	130.0	False	-1,183.60	3.36
P-505	J-50	J-5	12.0	130.0	False	39.69	0.11
25	106	J-206	6.0	130.0	False	192.13	2.18
P-276	J-274	J-276	10.0	130.0	False	74.53	0.30
P-270	186	J-217	12.0	130.0	False	444.59	1.26
P-5	J-5	J-6	10.0	130.0	False	77.04	0.31
P327	Oak Hollow	J162	18.0	130.0	False	495.62	0.62
P31	J28	8052	12.0	130.0	False	-203.32	0.58
P-1	J148	J-2	12.0	130.0	False	246.68	0.70
P-13	J-10	J-11	8.0	130.0	False	-63.99	0.41
P-14	J-11	J-12	8.0	130.0	False	-94.00	0.60
P-15	J-12	J-13	8.0	130.0	False	-94.00	0.60
P-17	J128	J-16	12.0	130.0	False	-242.06	0.69
P-18	J-16	J-17	12.0	130.0	False	-242.06	0.69
P-19	J-17	J-18	12.0	130.0	False	-242.06	0.69
P-20	J-18	J-19	12.0	130.0	False	-242.06	0.69
P-21	J-19	J-20	12.0	130.0	False	-242.06	0.69
P-23	J-21	J-22	12.0	130.0	False	-484.16	1.37
P-24	J-22	J-23	12.0	130.0	False	-484.16	1.37
P-25	J-23	J-24	12.0	130.0	False	-484.16	1.37
P-26	J-24	J-25	12.0	130.0	False	-484.16	1.37
P-33	J144	J-31	6.0	130.0	False	1.93	0.02
P-34	J-31	J-32	6.0	130.0	False	55.48	0.63
P-36	J-33	J-34	6.0	130.0	False	-67.53	0.77
P-37	J-34	J-35	6.0	130.0	False	-35.37	0.40
P-38	J-35	J-36	8.0	130.0	False	-153.45	0.98
P-39	J-36	J-37	8.0	130.0	False	-219.55	1.40
P-40	J-37	J-38	8.0	130.0	False	-219.55	1.40
P-41	J-38	J-39	8.0	130.0	False	-219.55	1.40



FlexTable: Pipe Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Start Node	Stop Node	Diameter (in)	Hazen-Williams C	Has Check Valve?	Flow (Maximum) (gpm)	Velocity (ft/s)
P-43	J-40	J-41	8.0	130.0	False	-202.12	1.29
P-44	J-41	J-42	8.0	130.0	False	-202.12	1.29
P-45	J-42	J-43	8.0	130.0	False	-202.12	1.29
P-46	J-43	J-44	8.0	130.0	False	-202.12	1.29
P-47	J-44	J-45	8.0	130.0	False	-202.12	1.29
P-48	J-45	J-46	8.0	130.0	False	-202.12	1.29
P-50	J-47	J-48	10.0	130.0	False	-353.55	1.44
P-51	J-48	J-49	10.0	130.0	False	-353.55	1.44
P-52	J-49	J-50	16.0	130.0	False	1,029.72	1.64
P-53	J-50	J-51	16.0	130.0	False	1,029.72	1.64
P-54	J-51	J-52	16.0	130.0	False	1,090.43	1.74
P-55	J-52	J-53	16.0	130.0	False	1,090.43	1.74
P-56	J-53	J-54	16.0	130.0	False	1,090.43	1.74
P-57	J-54	J-55	16.0	130.0	False	944.85	1.51
P-58	J-55	J-56	16.0	130.0	False	944.85	1.51
P-59	J-56	J-57	16.0	130.0	False	944.85	1.51
P-60	J-57	J-58	16.0	130.0	False	944.85	1.51
P-61	J-58	J-59	16.0	130.0	False	944.85	1.51
P-62	J-59	J-60	16.0	130.0	False	944.85	1.51
P-63	J-60	J-61	16.0	130.0	False	-944.85	1.51
P-64	J-61	J-62	16.0	130.0	False	-1,492.97	2.38
P-65	J-62	J-63	16.0	130.0	False	-1,658.68	2.65
P-74	J-68	J-69	6.0	130.0	False	139.38	1.58
P-75	J-69	J-70	6.0	130.0	False	49.38	0.56
P-77	J-71	J-72	6.0	130.0	False	61.57	0.70
P-78	J-72	J-73	6.0	130.0	False	61.57	0.70
P-79	J-73	J-74	6.0	130.0	False	69.24	0.79
P-80	J136	J-75	8.0	130.0	False	56.68	0.43
P-81	J-75	J144	6.0	130.0	False	41.93	0.48

FlexTable: Pipe Table (traversewater.wtg)

Current Time: 0.000 hours

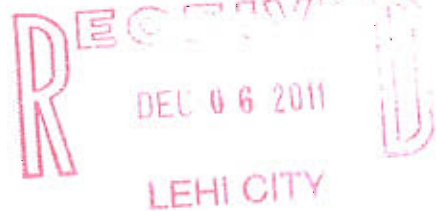
Label	Start Node	Stop Node	Diameter (in)	Hazen-Williams C	Has Check Valve?	Flow (Maximum) (gpm)	Velocity (ft/s)
P-82	J-74	J-75	6.0	130.0	False	69.24	0.79
P-88	J-80	J-81	12.0	130.0	False	3,178.69	9.02
P-90	J-82	J-83	10.0	130.0	False	2,571.53	10.50
P-91	J-83	J-84	10.0	130.0	False	2,571.53	10.50
P-92	J-84	J-85	10.0	130.0	False	2,571.53	10.50
P-93	J-85	J-86	10.0	130.0	False	1,846.01	7.54
P-94	J-86	J-87	10.0	130.0	False	1,846.01	7.54
P-95	J-87	J-88	10.0	130.0	False	1,846.01	7.54
P-96	J-81	J-89	12.0	130.0	False	1,408.06	3.99
P-98	J-89	J-90	10.0	130.0	False	-1,301.47	5.32
P-104	200	J-94	6.0	130.0	False	298.40	3.39
P-105	J-94	J-95	6.0	130.0	False	288.68	3.28
P-106	J-95	J-96	6.0	130.0	False	288.68	3.28
P-110	8060	8058	12.0	130.0	False	1,267.70	3.60
P-112	J-270	Oak-26	12.0	130.0	False	498.21	1.41
P-114	8050	J-102	12.0	130.0	False	288.04	0.82
P-115	J-102	J24	12.0	130.0	False	288.04	0.82
P-117	J24	Oak-27	12.0	130.0	False	56.68	0.16
P-118	Oak-27	J26	12.0	130.0	False	56.68	0.16
P-121	J-89	Caye-31	10.0	130.0	False	2,571.53	10.50
P-122	Caye-31	J-82	6.0	130.0	False	2,571.53	29.18
P-125	J-2	Cay-24	10.0	130.0	False	246.68	1.01
P-126	Cay-24	J132	10.0	130.0	False	246.68	1.01
P-128	Cay-34	J134	8.0	130.0	False	186.68	1.19
P-129	J132	J-103	10.0	130.0	False	186.68	0.76
P-130	J-103	J-104	10.0	130.0	False	186.68	0.76
P-131	J-104	J-105	10.0	130.0	False	186.68	0.76
P-132	J-105	J-106	10.0	130.0	False	186.68	0.76
P-133	J-106	J-107	10.0	130.0	False	186.68	0.76

Bentley WaterCAD V8i (SELECTseries 3)
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Bentley Systems, Inc. Haestad Methods Solution Center
27 Siemon Company Drive Suite 200 Wv Watertown, CT 06795 USA
+1-203-755-1366

traversewater.wtg
12/4/2011

MW, Brown Engineering, Inc



FlexTable: Pipe Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Start Node	Stop Node	Diameter (in)	Hazen-Williams C	Has Check Valve?	Flow (Maximum) (gpm)	Velocity (ft/s)
P-134	J-107	J-108	10.0	130.0	False	186.68	0.76
P-135	J-108	Cay-34	10.0	130.0	False	186.68	0.76
P-136	J-46	Cay-21	10.0	130.0	False	-353.55	1.44
P-137	Cay-21	J-47	10.0	130.0	False	-353.55	1.44
P-138	J-39	Cay-31	8.0	130.0	False	-219.55	1.40
P-139	Cay-31	J-40	8.0	130.0	False	-219.55	1.40
P-140	J-70	Cay-33	6.0	130.0	False	221.79	2.52
P-141	Cay-33	J-71	6.0	130.0	False	221.79	2.52
P-142	J-110	J-67	6.0	130.0	False	271.79	2.56
P-143	J-67	Cay-22	6.0	130.0	False	271.79	2.56
P-144	Cay-22	J-68	6.0	130.0	False	271.79	2.56
P-147	J-110	J-13	8.0	130.0	False	234.89	1.50
P-149	J-162	J-112	14.0	130.0	False	439.13	0.92
P-150	J-112	J-203	14.0	130.0	False	701.51	0.42
P-151	J-112	266	6.0	130.0	False	207.62	2.36
P-153	J-217	Oak-25	12.0	130.0	False	1,269.73	3.60
P-154	Oak-25	194	12.0	130.0	False	1,269.73	3.60
P-156	J-276	Oak-34	10.0	130.0	False	88.19	0.36
P-158	West Canyon	J-114	18.0	130.0	False	1,909.97	2.41
P-159	J-62	J-115	16.0	130.0	False	-1,658.68	2.65
P-160	J-115	J-63	6.0	130.0	False	211.29	2.85
P-161	J-114	J-115	18.0	130.0	False	1,909.97	2.41
P-166	J-240	176	12.0	130.0	False	204.83	0.58
P-167	172	J-117	6.0	130.0	False	-7.46	0.08
P-171	J-119	174	6.0	130.0	False	-73.81	0.84
P-173	J-119	J-120	6.0	130.0	False	13.49	0.15
P-174	J-120	J-121	6.0	130.0	False	-14.77	0.17
P-175	J-121	J-122	6.0	130.0	False	29.05	0.33
P-176	172	J-123	6.0	130.0	False	-12.77	0.14

FlexTable: Pipe Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Start Node	Stop Node	Diameter (in)	Hazen-Williams C	Has Check Valve?	Flow (Maximum) (gpm)	Velocity (ft/s)
P-177	J-123	J-119	6.0	130.0	False	-17.32	0.20
P-178	J-122	J-123	6.0	130.0	False	7.22	0.08
P-181	J-117	J-125	6.0	130.0	False	-5.76	0.07
P-182	J-125	J-119	6.0	130.0	False	-27.00	0.31
P-183	J-123	J-125	6.0	130.0	False	-5.24	0.06
P-184	172	J-126	6.0	130.0	False	3.23	0.04
P-185	J-122	J-126	6.0	130.0	False	18.10	0.21
P-187	J-120	J-122	6.0	130.0	False	12.26	0.14
P-188	J-294	J-127	12.0	130.0	False	-244.46	0.69
P-189	J-127	J-229	12.0	130.0	False	-321.29	0.91
P-190	J-121	J-127	6.0	130.0	False	-59.83	0.68
P-192	J-128	276	8.0	130.0	False	52.93	0.34
P-194	J-129	266	6.0	130.0	False	-196.62	2.23
P-195	J-128	J-129	6.0	130.0	False	-150.76	1.71
P-196	J-129	260	6.0	130.0	False	26.85	0.30
P-197	262	J-130	6.0	130.0	False	199.98	2.27
P-198	J-130	246	6.0	130.0	False	107.52	1.22
P-199	260	J-130	6.0	130.0	False	-82.45	0.94
P-200	214	J-131	6.0	130.0	False	59.33	0.67
P-201	J-131	222	6.0	130.0	False	158.72	1.80
P-202	216	J-132	6.0	130.0	False	-91.33	1.04
P-203	J-132	218	6.0	130.0	False	-222.72	2.53
P-204	J-131	J-132	6.0	130.0	False	-115.39	1.31
P-208	J-133	J-134	6.0	130.0	False	0.61	0.01
P-209	J-134	278	6.0	130.0	False	-12.17	0.14
P-211	280	J-136	6.0	130.0	False	0.00	0.00
P-212	J-136	J-133	6.0	130.0	False	-0.82	0.01
P-213	J-136	J-135	6.0	130.0	False	-15.18	0.17
P-214	J-135	J-128	6.0	130.0	False	-67.83	0.77

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Bentley Systems, Inc. Haestad Methods Solution Center
27 Siemon Company Drive, Suite 200 W. Watertown, CT 06795 USA
+1-203-755-1666

traversewater.wtg
12/4/2011
MW Brown Engineering, Inc.



FlexTable: Pipe Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Start Node	Stop Node	Diameter (in)	Hazen-Williams C	Has Check Valve?	Flow (Maximum) (gpm)	Velocity (ft/s)
P-215	J-135	J-133	6.0	130.0	False	17.43	0.20
P-216	J-138	J-137	8.0	130.0	False	-28.77	0.18
P-217	J-137	140	8.0	130.0	False	519.10	3.31
P-219	154	Oak-24	8.0	130.0	False	562.87	3.59
P-220	Oak-24	J-137	6.0	130.0	False	562.87	6.79
P-221	100	J-138	14.0	130.0	False	-952.99	1.99
P-222	J-138	102	14.0	130.0	False	-951.53	1.98
P-223	J-236	J-139	6.0	130.0	False	-111.21	1.26
P-224	J-139	J-215	6.0	130.0	False	-98.15	1.11
P-225	J-138	J-139	6.0	130.0	False	-15.44	0.18
P-226	J-214	J-140	6.0	130.0	False	116.99	1.33
P-227	J-140	J-215	6.0	130.0	False	5.49	0.06
P-228	8020	J-142	6.0	130.0	False	165.92	1.88
P-230	J-142	J-143	6.0	130.0	False	87.59	0.99
P-231	J-143	J-144	6.0	130.0	False	24.71	0.28
P-232	J-144	J-145	6.0	130.0	False	64.85	0.74
P-233	J-145	J-209	6.0	130.0	False	106.73	1.21
P-234	J-209	J-146	6.0	130.0	False	-110.69	1.26
P-235	J-146	J-210	6.0	130.0	False	-100.50	1.14
P-236	J-146	J-144	6.0	130.0	False	-17.19	0.20
P-237	J-144	J-147	6.0	130.0	False	-64.33	0.73
P-238	J-147	J-142	6.0	130.0	False	-71.33	0.81
P-239	J-145	J-148	6.0	130.0	False	-48.88	0.55
P-240	J-148	J-143	6.0	130.0	False	-55.88	0.63
P-241	142	J-149	6.0	130.0	False	63.52	0.72
P-242	J-149	J-150	6.0	130.0	False	38.14	0.43
P-243	J-150	J-151	6.0	130.0	False	6.14	0.07
P-244	J-151	J-152	6.0	130.0	False	-38.55	0.44
P-245	J-152	160	6.0	130.0	False	-75.17	0.85

FlexTable: Pipe Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Start Node	Stop Node	Diameter (in)	Hazen-Williams C	Has Check Valve?	Flow (Maximum) (gpm)	Velocity (ft/s)
P-246	J-149	J-152	6.0	130.0	False	-5.62	0.06
P-247	J-151	J-153	6.0	130.0	False	13.69	0.16
P-249	124	J-154	6.0	130.0	False	125.45	1.42
P-250	J-154	J-153	6.0	130.0	False	50.31	0.57
P-251	J-153	J-155	6.0	130.0	False	-49.00	0.56
P-252	J-155	126	6.0	130.0	False	-200.86	2.28
P-253	J-154	J-155	6.0	130.0	False	-38.87	0.44
P-254	152	J-156	6.0	130.0	False	-31.19	0.35
P-255	J-156	J-157	6.0	130.0	False	1.17	0.01
P-256	J-157	J-158	6.0	130.0	False	8.60	0.10
P-257	J-158	J-159	6.0	130.0	False	-13.40	0.15
P-258	J-159	J-160	6.0	130.0	False	-42.83	0.49
P-259	J-160	J-161	6.0	130.0	False	-39.18	0.44
P-260	J-161	J-162	6.0	130.0	False	-40.54	0.46
P-261	J-162	J-163	6.0	130.0	False	-51.54	0.58
P-262	132	J-164	12.0	130.0	False	-516.84	1.47
P-263	J-164	J-275	12.0	130.0	False	-648.38	1.84
P-264	J-163	J-164	6.0	130.0	False	-131.55	1.49
P-265	J-163	J-165	6.0	130.0	False	69.01	0.78
P-266	J-165	J-160	6.0	130.0	False	14.65	0.17
P-267	J-159	J-157	6.0	130.0	False	18.42	0.21
P-268	J-156	J-165	6.0	130.0	False	-43.36	0.49
P-269	234	240	6.0	130.0	False	-5.00	0.06
P-270	226	J-166	6.0	130.0	False	58.52	0.66
P-272	J-166	J-230	6.0	130.0	False	58.52	0.66
P-274	J-207	J-167	12.0	130.0	False	432.79	1.23
P-280	Oak-11	J-167	12.0	130.0	False	-99.77	0.28
P-281	J-134	J-168	6.0	130.0	False	-3.22	0.04
P-282	J-168	J-135	6.0	130.0	False	-19.22	0.22



FlexTable: Pipe Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Start Node	Stop Node	Diameter: (in)	Hazen-Williams C	Has Check Valve?	Flow (Maximum) (gpm)	Velocity (ft/s)
P-285	252	J-170	6.0	130.0	False	187.80	2.13
P-286	J-170	210	6.0	130.0	False	157.80	1.79
P-287	166	J-171	6.0	130.0	False	-33.54	0.38
P-289	J-171	J-172	6.0	130.0	False	-61.54	0.70
P-291	J-172	J-173	6.0	130.0	False	-74.54	0.85
P-293	J-173	J-174	6.0	130.0	False	-94.54	1.07
P-294	J-174	170	6.0	130.0	False	-117.54	1.33
P-295	252	J-175	6.0	130.0	False	-8.00	0.09
P-296	J-175	256	6.0	130.0	False	-18.00	0.20
P-297	J-117	J-176	6.0	130.0	False	-17.69	0.20
P-298	J-176	176	6.0	130.0	False	-29.69	0.34
P-300	J-177	168	6.0	130.0	False	-25.94	0.29
P-301	J-126	J-178	6.0	130.0	False	3.92	0.01
P-302	J-178	J-177	6.0	130.0	False	-21.08	0.24
P-303	J-1	J-179	10.0	130.0	False	-60.30	0.25
P-304	J-179	J-6	10.0	130.0	False	-71.64	0.29
P-305	J-218	J-180	12.0	130.0	False	727.14	2.06
P-306	J-180	J-278	12.0	130.0	False	1,057.51	3.00
P-307	194	J-181	12.0	130.0	False	392.59	1.11
P-308	J-181	J-277	12.0	130.0	False	91.02	0.26
P-310	Oak-26	J-182	12.0	130.0	False	498.21	1.41
P-311	J-182	J-273	12.0	130.0	False	314.70	0.89
P-313	J-180	J-183	10.0	130.0	False	-330.37	1.35
P-314	J-183	J-181	10.0	130.0	False	-407.72	1.67
P-315	J-181	J-184	10.0	130.0	False	-106.15	0.43
P-316	J-184	J-182	10.0	130.0	False	-183.51	0.75
P-317	190	J-185	6.0	130.0	False	-176.02	2.00
P-318	J-185	J-186	6.0	130.0	False	-187.27	2.12
P-320	8026	J-188	12.0	130.0	False	-1,286.75	3.65

FlexTable: Pipe Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Start Node	Stop Node	Diameter (in)	Hazen-Williams C	Has Check Valve?	Flow (Maximum) (gpm)	Velocity (ft/s)
P-322	J-186	J-186	6.0	130.0	False	187.27	2.12
P-323	184	J-189	12.0	130.0	False	-1,298.00	3.68
P-324	J-189	8024	12.0	130.0	False	-1,286.75	3.65
P-326	J-189	J-190	6.0	130.0	False	-11.25	0.13
P-327	J-190	J-185	6.0	130.0	False	-11.25	0.13
P-328	124	J-191	6.0	130.0	False	-54.82	0.62
P-329	J-191	118	6.0	130.0	False	-9.39	0.11
P-330	J-191	J-192	6.0	130.0	False	-45.42	0.52
P-331	118	J-193	6.0	130.0	False	-44.39	0.50
P-332	J-193	126	6.0	130.0	False	-89.82	1.02
P-333	J-192	J-193	6.0	130.0	False	-45.42	0.52
P-334	J-50	J-194	10.0	130.0	False	26.51	0.11
P-335	Oak-34	J-195	10.0	130.0	False	88.19	0.36
P-336	J-195	J-5	10.0	130.0	False	37.36	0.15
P-337	J-194	J-195	10.0	130.0	False	-50.84	0.21
P-339	J-196	Oak-31	12.0	130.0	False	-99.77	0.28
P-340	J-196	J-197	10.0	130.0	False	96.89	0.40
P-341	J-197	J-198	10.0	130.0	False	71.51	0.29
P-344	J-198	J-199	10.0	130.0	False	51.80	0.21
P-345	166	J-200	6.0	130.0	False	90.61	1.03
P-346	J-200	164	6.0	130.0	False	45.79	0.52
P-347	J-200	J-201	6.0	130.0	False	44.82	0.51
P-348	J-201	J-202	6.0	130.0	False	28.82	0.33
P-349	J-202	164	6.0	130.0	False	15.82	0.18
P-351	J-203	J-140	6.0	130.0	False	-97.50	1.11
P-352	J-203	J-204	6.0	130.0	False	28.58	0.32
P-353	J-204	J-205	6.0	130.0	False	14.58	0.17
P-354	J-139	J-206	6.0	130.0	False	-41.50	0.47
P-355	J-206	J-203	6.0	130.0	False	-54.92	0.62



FlexTable: Pipe Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Start Node	Stop Node	Diameter (in)	Hazen-Williams C	Has Check Valve?	Flow (Maximum) (gpm)	Velocity (ft/s)
P-356	J-205	J-206	6.0	130.0	False	0.58	0.01
P-357	J-49	J-207	10.0	130.0	False	28.17	0.12
P-359	J-207	J-208	10.0	130.0	False	-20.92	0.09
P-361	J-208	J-209	10.0	130.0	False	-121.94	0.50
P-363	J-209	J-210	10.0	130.0	False	-161.90	0.66
P-364	J-210	J-50	10.0	130.0	False	-168.65	0.69
P-365	J-221	J-211	12.0	130.0	False	1,049.14	2.98
P-366	J-211	J-246	12.0	130.0	False	1,038.14	2.91
P-367	Oak-32	J-212	10.0	130.0	False	61.61	0.25
P-368	J-212	J-199	10.0	130.0	False	40.55	0.17
P-371	Oak-22	J-230	12.0	130.0	False	63.66	0.18
P-372	J-204	J-213	14.0	130.0	False	89.66	0.19
P-373	J-213	Oak-22	14.0	130.0	False	63.66	0.13
P-376	J-96	J-215	6.0	130.0	False	748.68	2.82
P-377	J-215	J-214	6.0	130.0	False	248.68	2.82
P-379	J-188	J-216	12.0	130.0	False	-1,474.02	4.18
P-380	J-216	8060	12.0	130.0	False	1,594.34	4.52
P-382	J-88	Oak-11	10.0	130.0	False	3,893.50	15.90
P-383	Oak-11	J-216	10.0	130.0	False	3,893.50	15.90
P-384	J-199	J-217	10.0	130.0	False	74.25	0.30
P-385	J-217	J-49	10.0	130.0	False	29.43	0.12
P-387	J-217	J-218	10.0	130.0	False	44.83	0.18
P-390	J-219	J-207	10.0	130.0	False	-49.09	0.20
P-392	J-218	J-220	10.0	130.0	False	44.83	0.18
P-393	J-220	J-219	10.0	130.0	False	-49.09	0.20
P-395	J-220	J-221	10.0	130.0	False	8.33	0.03
P-397	J-221	J-222	10.0	130.0	False	-3.60	0.01
P-398	J-222	J-208	10.0	130.0	False	-101.02	0.41
P-399	J-221	J-222	8.0	130.0	False	-1.57	0.01

FlexTable: Pipe Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Start Node	Stop Node	Diameter (in)	Hazen-Williams C	Has Check Valve?	Flow (Maximum) (gpm)	Velocity (ft/s)
P-405	270	Oak-21	6.0	130.0	False	482.18	5.47
P-406	Oak-21	218	6.0	130.0	False	482.18	5.47
P-407	Flight Park	J-167	16.0	130.0	False	-333.03	0.53
P-408	J-63	J-224	6.0	130.0	False	148.29	1.68
P-409	J-224	J-225	6.0	130.0	False	-27.71	0.31
P-410	J-225	J-49	6.0	130.0	False	-83.71	0.95
P-411	J-61	J-226	6.0	130.0	False	165.71	1.88
P-412	J-226	J-51	6.0	130.0	False	60.71	0.69
P-413	J-40	J-227	6.0	130.0	False	-17.43	0.20
P-416	J-20	J-228	12.0	130.0	False	-242.06	0.69
P-417	J-228	J-21	12.0	130.0	False	-484.16	1.37
P-420	J-13	J-229	6.0	130.0	False	81.11	0.92
P-421	J-229	J-230	6.0	130.0	False	-24.78	0.28
P-422	J-230	J-10	6.0	130.0	False	6.01	0.07
P-423	J-11	J-230	6.0	130.0	False	30.79	0.35
P-424	J-46	J-227	6.0	130.0	False	151.43	1.72
P-425	J-25	J-110	12.0	130.0	False	460.69	1.31
P-426	J-11	J-231	6.0	130.0	False	-0.78	0.01
P-427	J-231	J-13	6.0	130.0	False	-59.78	0.68
P-428	J-113	J-232	6.0	130.0	False	92.34	1.05
P-429	J-232	J-233	6.0	130.0	False	60.34	0.68
P-430	J-233	J-68	6.0	130.0	False	1.34	0.02
P-431	J-68	J-234	6.0	130.0	False	87.75	1.00
P-432	J-234	J-70	6.0	130.0	False	42.75	0.49
P-433	J-113	J-235	6.0	130.0	False	40.00	0.45
P-437	J-71	J-237	6.0	130.0	False	69.67	0.79
P-438	J-237	J-73	6.0	130.0	False	7.67	0.09
P-439	J-71	J-238	6.0	130.0	False	90.55	1.03
P-440	J-238	J-31	6.0	130.0	False	53.55	0.61



FlexTable: Pipe Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Start Node	Stop Node	Diameter (in)	Hazen-Williams C	Has Check Valve?	Flow (Maximum) (gpm)	Velocity (ft/s)
P-441	J-70	J-113	6.0	130.0	False	-129.66	1.47
P-442	J-36	284	6.0	130.0	False	66.10	0.75
P-443	284	J-35	6.0	130.0	False	-38.08	0.43
P-444	282	J-34	6.0	130.0	False	-13.42	0.15
P-446	J-54	Cay-32	6.0	130.0	False	145.58	1.65
P-447	Cay-32	J-34	6.0	130.0	False	145.58	1.65
P-448	J-32	J-239	6.0	130.0	False	-85.52	0.97
P-449	J-239	J-33	6.0	130.0	False	-67.53	0.77
P-450	J-239	J-240	6.0	130.0	False	-18.00	0.20
P-451	J-240	J-75	6.0	130.0	False	-18.00	0.20
P-452	J-228	J-241	8.0	130.0	False	242.10	1.55
P-453	J-241	J-229	8.0	130.0	False	-19.89	0.13
P-455	J-241	Cay-23	6.0	130.0	False	262.00	2.97
P-456	Cay-23	J-113	6.0	130.0	False	262.00	2.97
P-458	J-315	Cay-22	12.0	130.0	False	3,178.67	9.02
P-459	Cay-22	J-80	12.0	130.0	False	3,178.69	9.02
P-460	200	J-307	6.0	130.0	False	-307.40	3.49
P-462	J116	Cay-23	8.0	130.0	False	1,301.46	8.31
P-463	Cay-23	J-90	8.0	130.0	False	1,301.47	8.31
P-464	J-81	J-214	6.0	130.0	False	-224.68	2.55
P-466	J-242	J-88	8.0	130.0	False	1,767.91	11.28
P-467	J-85	J-243	6.0	130.0	False	725.52	8.23
P-468	J-243	J-88	6.0	130.0	False	279.58	3.17
P-469	J-81	Cay-32	8.0	130.0	False	1,902.91	12.15
P-470	Cay-32	J-242	8.0	130.0	False	1,902.91	12.15
P-473	Vialletto	J138	18.0	130.0	False	4,954.16	6.25
P-474	8060	J-244	8.0	130.0	False	193.64	1.24
P-475	J-244	J24	8.0	130.0	False	-31.36	0.20
P-476	J-216	J-217	8.0	130.0	False	825.14	5.27

**CULINARY WATER
JUNCTION TABLE**

WAT-53



FlexTable: Junction Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Pressure (Maximum) (psi)
100	5,046.76	14.00	5,197.13	65.1	65.1
102	5,100.82	14.00	5,199.31	42.6	42.6
106	5,054.34	0.00	5,199.16	62.7	62.7
108	5,107.83	0.00	5,200.89	40.3	40.3
110	4,950.00	16.00	5,194.55	105.8	105.8
112	4,948.57	16.00	5,194.43	106.4	106.4
114	4,973.98	16.00	5,193.13	94.8	94.8
116	4,892.87	19.00	5,072.85	77.9	77.9
118	4,894.99	16.00	5,072.88	77.0	77.0
124	4,860.31	0.00	5,072.77	91.9	91.9
126	4,834.00	0.00	5,073.21	103.5	103.5
132	4,903.50	0.00	5,071.74	72.8	72.8
138	4,929.72	28.77	5,076.49	63.5	63.5
140	4,912.23	15.00	5,073.79	69.9	69.9
142	4,898.18	0.00	5,072.57	75.5	75.5
144	4,909.01	16.00	5,071.08	70.1	70.1
146	4,927.45	16.00	5,071.10	62.1	62.1
148	4,939.84	21.00	5,071.25	56.9	56.9
150	4,892.74	0.00	5,071.07	77.2	77.2
152	4,898.80	0.00	5,071.46	74.7	74.7
154	4,962.18	15.00	5,191.65	99.3	99.3
156	4,909.66	20.00	5,072.83	70.5	70.5
158	4,933.00	14.00	5,191.65	111.9	111.9
160	4,875.08	0.00	5,072.64	85.5	85.5
164	4,816.65	0.00	5,069.96	109.6	109.6
166	4,845.98	0.00	5,070.31	97.1	97.1
168	4,850.10	0.00	5,070.43	95.3	95.3
170	4,893.91	0.00	5,071.16	76.7	76.7
172	4,817.88	17.00	5,070.40	109.3	109.3

FlexTable: Junction Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Pressure (Maximum) (psi)
174	4,844.66	66.00	5,070.54	97.7	97.7
176	4,824.23	14.00	5,070.44	106.5	106.5
178	4,950.01	0.00	5,194.72	105.9	105.9
184	5,089.93	0.00	5,204.31	49.5	49.5
186	4,958.33	0.00	5,206.63	107.4	107.4
190	5,052.46	7.00	5,204.17	65.6	65.6
194	4,933.79	0.00	5,079.16	62.9	62.9
196	4,912.94	0.00	5,078.76	71.7	71.7
198	4,932.24	150.00	5,078.95	63.5	63.5
200	5,177.22	0.00	5,401.94	97.2	97.2
202	5,142.49	5.00	5,401.93	112.2	112.2
204	5,126.91	4.00	5,401.93	119.0	119.0
206	5,118.04	0.00	5,199.59	35.3	35.3
208	5,096.17	0.00	5,200.05	44.9	44.9
210	4,834.26	0.00	5,071.57	102.7	102.7
212	4,864.08	0.00	5,072.26	90.1	90.1
214	4,896.35	16.00	5,074.20	76.9	76.9
216	4,928.53	16.00	5,074.56	63.2	63.2
218	4,931.66	0.00	5,075.24	62.1	62.1
220	4,904.84	16.00	5,073.57	73.0	73.0
222	4,861.08	17.00	5,073.45	91.9	91.9
224	4,950.49	9.00	5,070.83	52.1	52.1
226	4,909.26	9.00	5,070.83	69.9	69.9
230	4,931.75	7.00	5,071.33	60.4	60.4
232	4,853.51	0.00	5,071.85	94.5	94.5
234	4,933.19	5.00	5,191.23	111.6	111.6
236	4,944.75	9.00	5,191.22	106.6	106.6
238	4,958.45	9.00	5,191.22	100.7	100.7
240	4,935.00	9.00	5,191.24	110.9	110.9



FlexTable: Junction Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Pressure (Maximum) (psi)
242	4,971.26	11.94	5,191.30	95.2	95.2
244	4,943.10	5.00	5,192.01	107.7	107.7
246	4,993.73	13.00	5,192.02	85.8	85.8
250	4,976.30	3.00	5,192.01	93.3	93.3
252	4,952.43	8.00	5,191.19	103.3	103.3
254	5,038.37	10.00	5,191.19	66.1	66.1
256	4,989.33	5.00	5,191.21	87.3	87.3
258	4,988.73	29.00	5,190.40	89.8	89.8
260	5,054.73	10.00	5,192.25	59.5	59.5
262	5,029.91	11.00	5,193.71	70.9	70.9
266	5,072.34	11.00	5,194.57	52.9	52.9
268	5,077.00	0.00	5,196.08	51.5	51.5
270	4,967.14	0.00	5,188.31	95.7	95.7
276	4,955.00	0.00	5,188.31	100.9	100.9
278	4,926.02	16.00	5,188.25	113.5	113.5
280	4,992.08	0.00	5,188.25	84.9	84.9
282	5,051.03	58.80	5,333.57	122.2	122.2
284	5,055.04	58.80	5,333.71	107.4	107.4
8020	5,076.47	7.00	5,204.09	55.2	55.2
8022	5,082.24	0.00	5,204.18	52.8	52.8
8024	5,080.00	0.00	5,208.22	55.5	55.5
8026	5,077.94	0.00	5,208.80	56.6	56.6
8030	5,075.00	12.69	5,199.48	53.9	53.9
8032	5,081.56	0.00	5,199.62	51.1	51.1
8040	4,886.31	0.00	5,071.49	80.1	80.1
8050	4,962.84	0.00	5,206.54	105.4	105.4
8052	4,841.38	0.00	5,078.89	102.8	102.8
8058	4,960.81	0.00	5,206.93	106.5	106.5
8060	4,966.24	133.00	5,207.45	104.4	104.4

FlexTable: Junction Table (traversewater.wfg)

Current Time: 0.000 hours

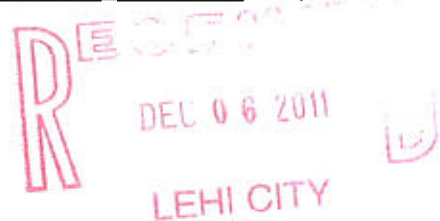
Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Pressure (Maximum) (psi)
J104	5,427.43	24.00	5,577.89	65.1	65.1
J116	5,485.00	14.00	5,571.16	37.3	37.3
J118	5,481.75	10.00	5,599.50	50.9	50.9
J126	5,442.88	0.00	5,599.47	67.7	67.7
J128	5,382.71	0.00	5,599.46	93.8	93.8
J130	5,420.00	64.00	5,599.12	77.5	77.5
J132	5,312.98	60.00	5,519.23	89.2	89.2
J134	5,215.94	60.00	5,333.17	50.7	50.7
J136	5,145.00	60.00	5,332.77	81.2	81.2
J138	5,478.70	0.00	5,599.52	52.3	52.3
J144	5,118.99	40.00	5,332.66	92.4	92.4
J148	5,353.35	50.00	5,599.24	106.4	106.4
J162	5,065.01	56.49	5,196.84	57.0	57.0
J-200	4,968.67	16.00	5,194.52	97.7	97.7
J-203	5,008.38	30.00	5,196.73	81.5	81.5
J-204	4,960.00	25.00	5,196.28	102.2	102.2
J-205	5,021.03	14.00	5,195.94	75.7	75.7
J-206	4,977.05	0.00	5,194.90	94.3	94.3
J-207	4,824.48	0.00	5,070.43	106.4	106.4
J-209	5,036.05	7.00	5,202.46	72.0	72.0
J-210	5,007.89	10.00	5,203.48	84.6	84.6
J-214	5,061.95	0.00	5,199.15	59.4	59.4
J-215	5,073.09	14.00	5,198.87	54.4	54.4
J-217	4,956.61	0.00	5,205.90	107.9	107.9
J-218	4,919.09	0.00	5,078.57	69.0	69.0
J-221	4,826.15	8.37	5,075.89	108.0	108.0
J-225	4,865.84	133.60	5,072.69	89.5	89.5
J-229	4,891.75	0.00	5,070.86	77.5	77.5
J-230	4,899.18	22.00	5,070.69	74.2	74.2

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12/4/2011

MW. Brown Engineering, Inc

Bentley Systems, Inc. Haestad Methods Solution Center
27 Siemon Company Drive Suite 200 W. Watertown, CT 06795 USA
+1-203-755-1666

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[08.11.00.17]
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FlexTable: Junction Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Pressure (Maximum) (psi)
J-236	5,023.80	14.00	5,197.00	74.9	74.9
J24	4,925.70	200.00	5,206.10	121.3	121.3
J-240	4,830.00	0.00	5,070.49	104.0	104.0
J-246	4,817.14	5.40	5,074.40	111.3	111.3
J-258	4,901.10	0.00	5,071.57	73.8	73.8
J26	4,873.85	130.00	5,078.55	88.6	88.6
J-270	4,946.23	36.85	5,206.42	112.6	112.6
J-273	4,895.06	36.85	5,079.11	79.6	79.6
J-274	4,841.73	0.00	5,078.94	102.6	102.6
J-275	4,902.88	0.00	5,072.33	73.3	73.3
J-276	4,815.00	0.00	5,078.88	114.2	114.2
J-277	4,837.03	77.36	5,078.88	104.6	104.6
J-278	4,855.92	0.00	5,077.13	95.7	95.7
J28	4,825.00	130.00	5,078.56	109.7	109.7
J-294	4,862.14	0.00	5,070.67	90.2	90.2
J-307	5,286.35	0.00	5,411.94	54.3	54.3
J-315	5,368.01	0.00	5,549.57	78.6	78.6
J-396	5,452.61	0.00	5,583.90	56.8	56.8
J-49	4,705.00	0.00	4,930.50	97.6	97.6
J-5	4,725.00	0.00	4,930.67	89.0	89.0
J-50	4,785.98	0.00	4,930.68	62.6	62.6
J-6	4,675.65	5.40	4,930.58	110.3	110.3
PRV-10-IN	4,806.78	0.00	5,074.35	114.9	114.9
PRV-25-IN	4,929.60	0.00	5,070.87	61.1	61.1
PRV-25-OUT	4,934.56	0.00	5,194.72	112.6	112.6
J-1	4,654.28	61.56	4,930.50	119.5	119.5
J-2	5,353.35	0.00	5,599.24	106.4	106.4
J-10	5,453.20	70.00	5,507.93	62.6	62.6
J-11	5,413.39	0.00	5,598.03	79.9	79.9

FlexTable: Junction Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Pressure (Maximum) (psi)
J-12	5,370.89	0.00	5,598.16	98.3	98.3
J-13	5,236.01	0.00	5,598.26	113.5	113.5
J-16	5,365.00	0.00	5,599.48	101.5	101.5
J-17	5,297.67	0.00	5,599.58	130.6	130.6
J-18	5,272.67	0.00	5,599.60	141.4	141.4
J-19	5,220.00	0.00	5,599.65	164.3	164.3
J-20	5,209.43	0.00	5,599.67	168.8	168.8
J-21	5,175.05	0.00	5,599.84	183.8	183.8
J-22	5,165.77	0.00	5,599.89	187.8	187.8
J-23	5,160.39	0.00	5,599.92	190.2	190.2
J-24	5,146.62	0.00	5,600.02	196.2	196.2
J-25	5,121.60	0.00	5,600.20	207.1	207.1
J-31	5,146.08	0.00	5,332.66	80.7	80.7
J-32	5,182.00	141.00	5,332.43	65.1	65.1
J-33	5,112.94	0.00	5,332.76	95.1	95.1
J-34	5,172.98	100.00	5,333.59	69.5	69.5
J-35	5,105.88	80.00	5,333.76	98.6	98.6
J-36	5,131.10	0.00	5,334.02	87.8	87.8
J-37	5,159.39	0.00	5,334.31	75.7	75.7
J-38	5,193.67	0.00	5,334.79	61.1	61.1
J-39	5,211.64	0.00	5,335.03	53.4	53.4
J-40	5,234.36	0.00	5,519.31	123.3	123.3
J-41	5,252.04	0.00	5,519.52	115.7	115.7
J-42	5,271.28	0.00	5,519.75	107.5	107.5
J-43	5,291.34	0.00	5,519.99	98.9	98.9
J-44	5,314.03	0.00	5,520.26	89.2	89.2
J-45	5,330.44	0.00	5,520.49	82.2	82.2
J-46	5,349.39	0.00	5,520.84	74.2	74.2
J-47	5,371.24	0.00	5,603.56	100.5	100.5



FlexTable: Junction Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Pressure (Maximum) (psi)
J-48	5,386.61	0.00	5,603.74	93.9	93.9
J-49	5,410.00	26.00	5,604.02	83.9	83.9
J-50	5,378.98	0.00	5,603.72	97.2	97.2
J-51	5,333.76	0.00	5,603.35	116.6	116.6
J-52	5,296.35	0.00	5,603.01	132.7	132.7
J-53	5,263.64	0.00	5,602.70	146.7	146.7
J-54	5,212.17	0.00	5,602.23	168.8	168.8
J-55	5,190.84	0.00	5,602.06	177.9	177.9
J-56	5,168.14	0.00	5,601.86	187.6	187.6
J-57	5,145.01	0.00	5,601.66	197.6	197.6
J-58	5,122.20	0.00	5,601.41	207.3	207.3
J-59	5,053.06	0.00	5,600.82	237.0	237.0
J-60	5,076.14	0.00	5,600.47	226.9	226.9
J-61	5,474.93	0.00	5,605.15	56.3	56.3
J-62	5,495.04	0.00	5,605.57	47.8	47.8
J-63	5,521.95	103.00	5,605.43	36.1	36.1
J-67	5,326.31	0.00	5,598.29	117.7	117.7
J-68	5,305.07	0.00	5,518.67	92.4	92.4
J-69	5,285.19	90.00	5,518.19	100.8	100.8
J-70	5,245.12	0.00	5,518.04	118.1	118.1
J-71	5,205.94	0.00	5,333.28	55.1	55.1
J-72	5,186.03	0.00	5,333.17	63.7	63.7
J-73	5,150.98	0.00	5,333.00	78.8	78.8
J-74	5,136.02	0.00	5,332.82	85.1	85.1
J-75	5,116.91	76.00	5,332.70	93.4	93.4
J-80	5,301.36	0.00	5,405.86	45.2	45.2
J-81	5,268.88	92.40	5,381.04	48.5	48.5
J-82	5,265.04	0.00	5,329.23	27.8	27.8
J-83	5,223.17	0.00	5,309.54	37.4	37.4

FlexTable: Junction Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Pressure (Maximum) (psi)
J-84	5,212.51	0.00	5,302.31	38.9	38.9
J-85	5,202.04	0.00	5,294.13	39.8	39.8
J-86	5,134.19	0.00	5,277.12	61.8	61.8
J-87	5,103.67	0.00	5,269.70	71.8	71.8
J-88	5,075.99	0.00	5,261.94	80.5	80.5
J-89	5,269.10	138.00	5,376.68	46.5	46.5
J-90	5,291.22	0.00	5,383.19	39.8	39.8
J-94	5,166.99	9.72	5,400.27	100.9	100.9
J-95	5,161.26	0.00	5,399.32	103.0	103.0
J-96	5,158.29	40.00	5,398.14	103.8	103.8
J-102	4,925.70	0.00	5,206.10	121.3	121.3
J-103	5,305.32	0.00	5,519.19	92.5	92.5
J-104	5,285.34	0.00	5,519.13	101.1	101.1
J-105	5,270.98	0.00	5,519.10	107.3	107.3
J-106	5,255.00	0.00	5,519.05	114.2	114.2
J-107	5,227.87	0.00	5,518.95	125.9	125.9
J-108	5,222.08	0.00	5,518.92	128.4	128.4
J-110	5,326.30	0.00	5,598.43	117.7	117.7
J-112	5,021.16	30.00	5,196.74	76.0	76.0
J-113	5,298.00	0.00	5,519.46	95.8	95.8
J-114	5,569.92	0.00	5,606.69	15.9	15.9
J-115	5,515.40	0.00	5,606.00	39.2	39.2
J-117	4,814.14	16.00	5,070.41	110.9	110.9
J-119	4,841.10	16.00	5,070.43	99.2	99.2
J-120	4,861.97	16.00	5,070.42	90.2	90.2
J-121	4,855.00	16.00	5,070.44	93.2	93.2
J-122	4,843.89	16.00	5,070.41	98.0	98.0
J-123	4,823.46	17.00	5,070.40	106.8	106.8
J-125	4,832.20	16.00	5,070.41	103.1	103.1

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12/4/2011
MW: Brown Engineering, Inc

Bentley Systems, Inc. Haeslrad Methods Solution Center
27 Senon Company Drive Suite 200 W. Waterstown CT 06795 USA
+1-203-755-1666

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[08.11.03.17]
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FlexTable: Junction Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Pressure (Maximum) (psi)
J-126	4,834.68	17.41	5,070.40	102.0	102.0
J-127	4,890.00	17.00	5,070.74	78.2	78.2
J-128	5,000.26	30.00	5,188.35	81.4	81.4
J-129	5,082.47	19.00	5,192.28	47.5	47.5
J-130	5,018.49	10.00	5,192.76	75.4	75.4
J-131	4,880.75	16.00	5,074.10	83.7	83.7
J-132	4,925.06	16.00	5,074.76	64.8	64.8
J-133	4,958.37	16.00	5,188.25	99.5	99.5
J-134	4,941.29	16.00	5,188.25	106.8	106.8
J-135	4,987.57	16.00	5,188.26	86.8	86.8
J-136	4,975.80	16.00	5,188.25	91.9	91.9
J-137	4,934.04	15.00	5,076.50	61.6	61.6
J-138	5,088.17	14.00	5,198.17	47.6	47.6
J-139	5,064.77	13.00	5,198.18	57.7	57.7
J-140	5,069.16	14.00	5,198.87	56.1	56.1
J-142	5,082.28	7.00	5,203.39	52.4	52.4
J-143	5,087.35	7.00	5,203.03	50.1	50.1
J-144	5,062.51	7.00	5,203.01	60.8	60.8
J-145	5,056.38	7.00	5,202.77	63.3	63.3
J-146	5,030.77	7.00	5,203.00	74.5	74.5
J-147	5,056.99	7.00	5,203.21	63.3	63.3
J-148	5,081.70	7.00	5,202.88	52.4	52.4
J-149	4,884.20	31.00	5,072.46	81.5	81.5
J-150	4,830.04	32.00	5,072.35	104.8	104.8
J-151	4,821.37	31.00	5,072.35	108.6	108.6
J-152	4,863.71	31.00	5,072.46	90.3	90.3
J-153	4,820.00	113.00	5,072.34	109.2	109.2
J-154	4,851.97	114.00	5,072.52	95.4	95.4
J-155	4,828.10	113.00	5,072.63	105.8	105.8

FlexTable: Junction Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Pressure (Maximum) (psi)
J-156	4,889.62	11.00	5,071.50	78.7	78.7
J-157	4,866.29	11.00	5,071.50	88.8	88.8
J-158	4,824.97	22.00	5,071.49	106.7	106.7
J-159	4,857.49	11.00	5,071.51	92.6	92.6
J-160	4,865.00	11.00	5,071.54	89.4	89.4
J-161	4,867.45	1.36	5,071.61	88.3	88.3
J-162	4,892.00	11.00	5,071.66	77.7	77.7
J-163	4,898.03	11.00	5,071.71	75.1	75.1
J-164	4,906.97	0.00	5,072.00	71.4	71.4
J-165	4,887.08	11.00	5,071.55	79.8	79.8
J-166	4,917.32	0.00	5,070.76	66.4	66.4
J-167	4,819.66	0.00	5,070.28	108.4	108.4
J-168	4,967.83	16.00	5,188.25	95.4	95.4
J-170	4,840.00	30.00	5,072.28	100.5	100.5
J-171	4,854.40	28.00	5,070.34	93.4	93.4
J-172	4,869.78	13.00	5,070.46	86.8	86.8
J-173	4,881.47	20.00	5,070.59	81.8	81.8
J-174	4,888.59	23.00	5,070.93	78.9	78.9
J-175	4,966.78	10.00	5,191.20	97.1	97.1
J-176	4,813.96	12.00	5,070.41	111.0	111.0
J-177	4,847.60	4.86	5,070.41	96.4	96.4
J-178	4,843.22	25.00	5,070.40	98.3	98.3
J-179	4,665.00	11.34	4,930.54	114.9	114.9
J-180	4,873.95	0.00	5,078.06	88.3	88.3
J-181	4,875.00	0.00	5,078.89	88.2	88.2
J-182	4,909.96	0.00	5,079.19	73.2	73.2
J-183	4,875.74	77.35	5,078.40	87.7	87.7
J-184	4,907.10	77.36	5,078.97	74.4	74.4
J-185	5,039.80	0.00	5,206.44	72.1	72.1

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traversewater.wtg
12/4/2011
MW. Brown Engineering, Inc

Bentley Systems, Inc. Haestad Methods Solution Center
27 Siemon Company Drive Suite 200 W. Watertown, CT 06795 USA
+1-203-755-1566

FlexTable: Junction Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Pressure (Maximum) (psi)
J-186	5,037.31	0.00	5,209.27	74.4	74.4
J-188	5,072.76	0.00	5,210.94	59.8	59.8
J-189	5,083.74	0.00	5,206.43	53.1	53.1
J-190	5,069.27	0.00	5,206.44	59.3	59.3
J-191	4,877.64	0.00	5,072.87	84.5	84.5
J-192	4,858.42	0.00	5,072.95	92.8	92.8
J-193	4,845.00	0.00	5,073.03	98.7	98.7
J-194	4,801.71	77.35	4,930.67	55.8	55.8
J-195	4,775.00	0.00	4,930.69	67.4	67.4
J-196	4,783.50	2.88	4,930.80	63.7	63.7
J-197	4,780.00	25.38	4,930.64	65.2	65.2
J-198	4,782.02	19.71	4,930.55	64.3	64.3
J-199	4,779.81	18.09	4,930.54	65.2	65.2
J-200	4,844.14	0.00	5,070.11	97.8	97.8
J-201	4,821.86	16.00	5,070.01	107.4	107.4
J-202	4,818.28	13.00	5,069.97	108.9	108.9
J-203	5,053.79	14.00	5,198.32	62.5	62.5
J-204	5,024.28	14.00	5,198.25	75.3	75.3
J-205	5,023.52	14.00	5,198.24	75.6	75.6
J-206	5,056.29	14.00	5,198.24	61.4	61.4
J-207	4,723.37	0.00	4,930.49	89.6	89.6
J-208	4,741.87	0.00	4,930.50	81.6	81.6
J-209	4,759.87	39.96	4,930.52	73.8	73.8
J-210	4,776.79	6.75	4,930.61	66.6	66.6
J-211	4,821.48	11.00	5,075.11	109.7	109.7
J-212	4,805.08	21.06	4,930.55	54.3	54.3
J-213	4,924.85	26.00	5,196.28	117.4	117.4
J-214	5,220.00	24.00	5,384.85	71.3	71.3
J-215	5,200.49	0.00	5,389.05	81.6	81.6

FlexTable: Junction Table (traversewater.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Pressure (Maximum) (psi)
J-216	5,030.88	0.00	5,215.38	79.8	79.8
J-217	4,730.00	0.00	4,930.50	86.7	86.7
J-218	4,755.00	0.00	4,930.49	75.9	75.9
J-219	4,755.00	0.00	4,930.47	75.9	75.9
J-220	4,755.00	85.59	4,930.46	75.9	75.9
J-221	4,762.00	13.50	4,930.46	72.9	72.9
J-222	4,762.00	95.85	4,930.46	72.9	72.9
J-224	5,520.00	176.00	5,603.41	36.1	36.1
J-225	5,440.00	56.00	5,603.51	70.7	70.7
J-226	5,430.00	105.00	5,603.71	75.2	75.2
J-227	5,250.00	134.00	5,519.33	116.5	116.5
J-228	5,200.21	0.00	5,599.69	172.8	172.8
J-229	5,360.00	86.00	5,597.85	102.9	102.9
J-230	5,430.00	0.00	5,597.93	72.7	72.7
J-231	5,380.00	59.00	5,598.03	94.3	94.3
J-232	5,320.00	32.00	5,518.91	86.1	86.1
J-233	5,300.00	59.00	5,518.67	94.6	94.6
J-234	5,290.00	45.00	5,518.15	98.7	98.7
J-235	5,280.00	40.00	5,519.32	103.5	103.5
J-237	5,210.00	62.00	5,333.01	53.2	53.2
J-238	5,190.00	37.00	5,332.88	61.8	61.8
J-239	5,148.19	0.00	5,332.63	79.8	79.8
J-240	5,053.00	0.00	5,332.66	121.0	121.0
J-241	5,277.69	0.00	5,597.83	138.5	138.5
J-242	5,104.00	135.00	5,293.42	82.0	82.0
J-243	5,092.00	445.94	5,272.06	77.9	77.9
J-244	5,000.00	225.00	5,206.07	89.2	89.2

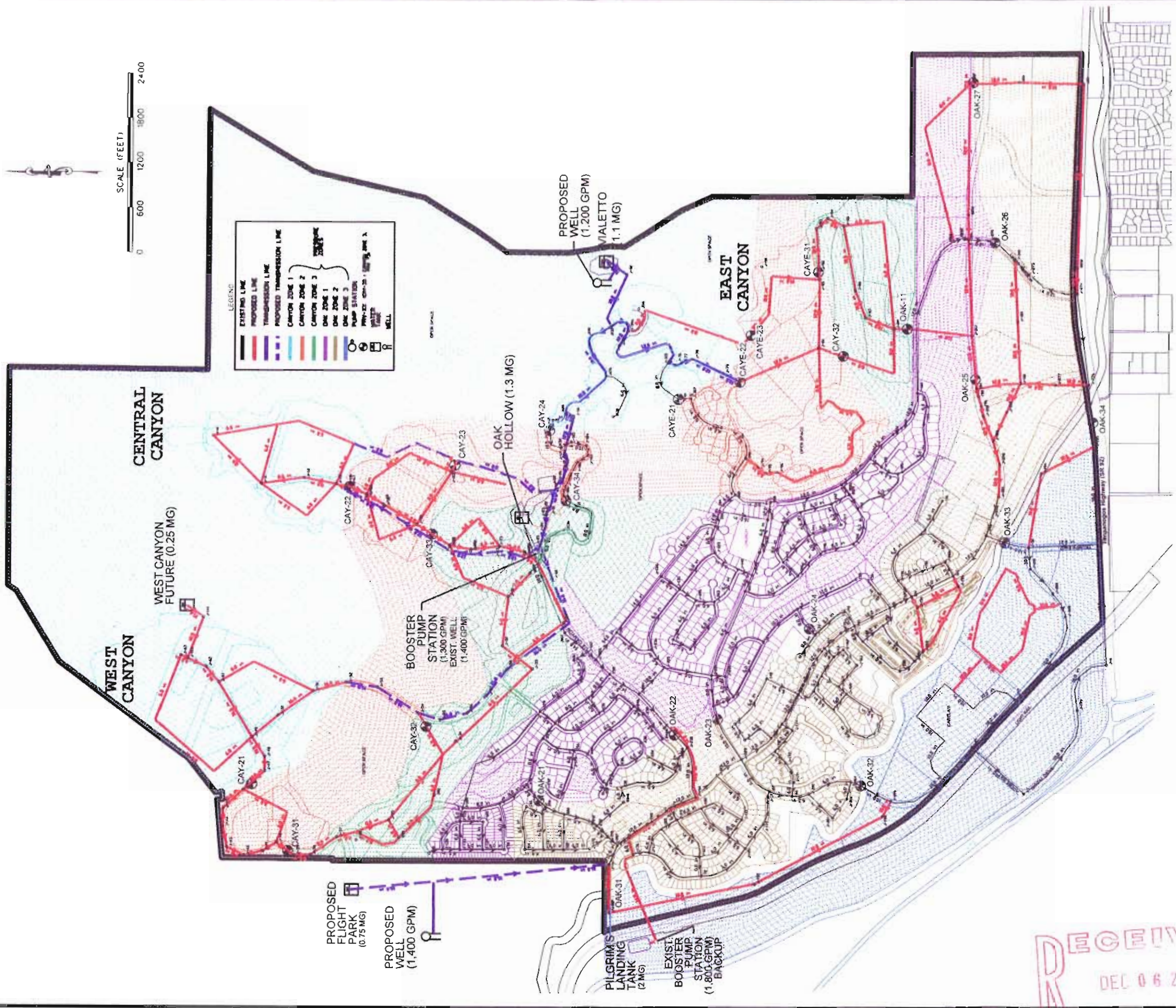
WAT-65



traversewater.wtg
12/4/2011

MW. Brown Engineering, Inc.

Bentley Systems, Inc. Haestad Methods Solution Center
27 Siemon Company Drive Suite 200 W. Watertown, CT 06795 USA
+1-203-755-1666



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LEHI CITY



Office: (801) 377-1790 Fax: (801) 377-1789
578 East 770 North, Orem UT 84097

Title:

CULINARY WATER PLAN

Client:

TRAVERSE MOUNTAIN, LEHI UTAH

Drawing Name:

CULINARY WATER PIPE SIZES

PROJECT NO.
2010-037-003

WAT-5

DATE: 12-5-11

CULINARY SUMMARY

CANYON ZONES REO'D - 1,500 GPM
 PROPOSED VIALETTA - 1,200 GPM
 OAK HOLLOW PUMP - 1,300 GPM
 TOTAL = 2,500 GPM
 OAK HOLLOW REO'D - 2,494 GPM
 OAK HOLLOW WELL - 1,400 GPM
 FLIGHT PARK WELL - 1,400 GPM
 PILGRIMS LANDING PUMP - 1,800 GPM
 TOTAL = 4,600 GPM

STORAGE REO'D:

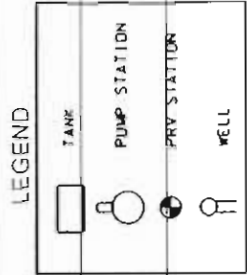
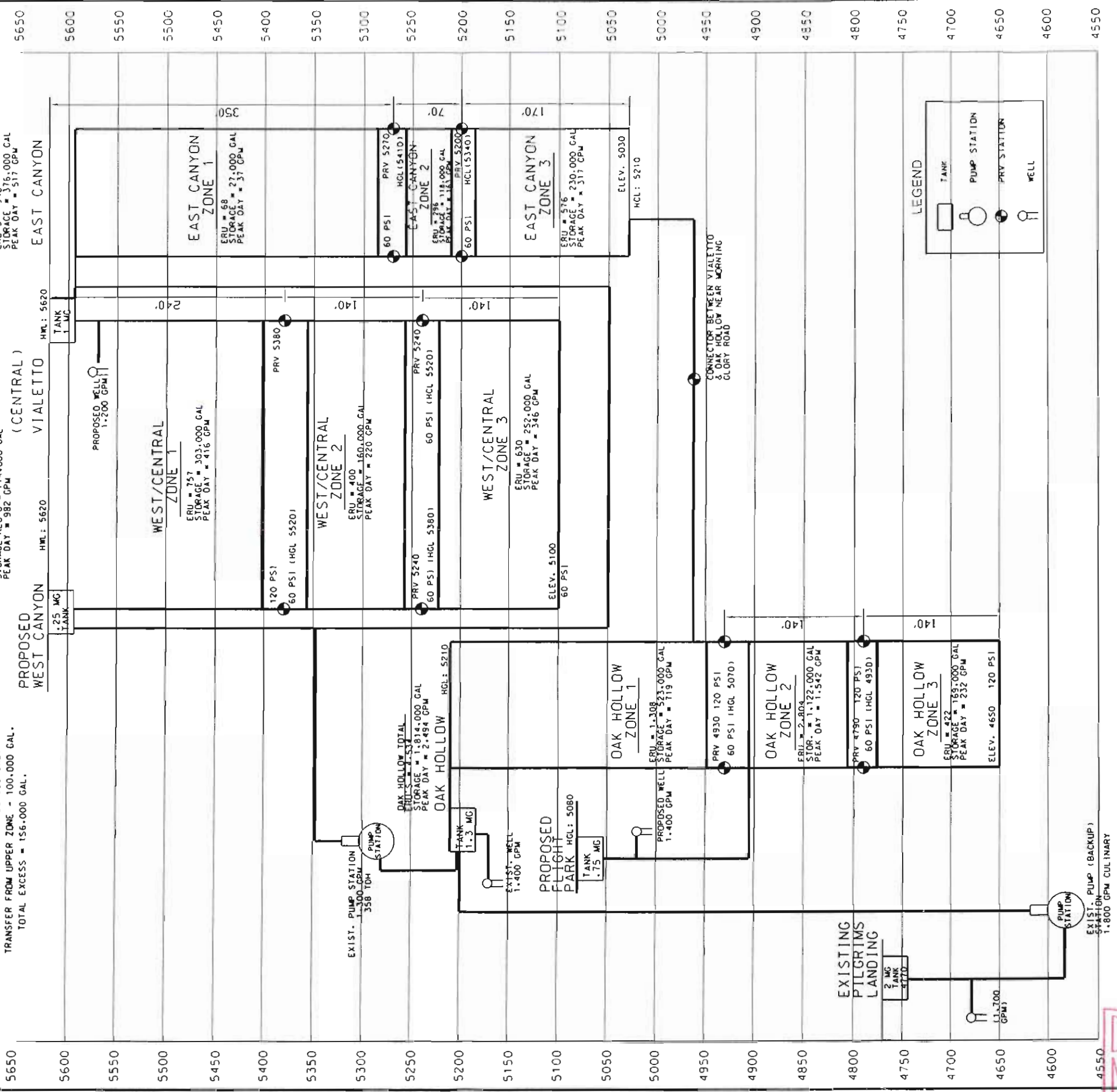
CANYON ZONES : (CENTRAL & WEST CANYON)
 FIRE STORAGE - 500 GPM x 2 HOURS = 60,000 GAL.
 STORAGE REO'D - 1,090,000 GAL.
 TOTAL STORAGE = 1,150,000 GAL.
 VIALETTA TANK - 1,000,000 GAL.
 WEST CANYON TANK - 250,000 GAL.
 TOTAL EXCESS = 100,000 GAL.
 OAK HOLLOW ZONE :
 FIRE STORAGE - 1,500 GPM x 2 HOURS = 180,000 GAL.
 STORAGE REO'D - 1,814,000 GAL.
 TOTAL STORAGE = 1,994,000 GAL.
 OAK HOLLOW TANK - 1,300,000 GAL.
 PROPOSED FLIGHT PARK - 750,000 GAL.
 TRANSFER FROM UPPER ZONE - 100,000 GAL.
 TOTAL EXCESS = 156,000 GAL.

CULINARY SUMMARY:

SOURCE REO'D - 3,993 GPM
 STORAGE REO'D - 2,904,000 GAL
 FIRE STORAGE REO'D - 240,000 CAL
 TOTAL REO'D - 3,144,000 CAL
 STORAGE PROVIDED - 3,300,000 CAL

CENTRAL TOTAL
 ERU = 1,186
 STORAGE REO'D = 714,000 GAL
 PEAK DAY = 982 GPM
 (CENTRAL)

EAST TOTAL
 ERU = 580
 STORAGE REO'D = 376,000 GAL
 PEAK DAY = 517 GPM
 EAST CANYON



Office: (801) 377-1790 Fax: (801) 377-1789
 578 East 770 North, Orem UT 84058

DEC 06 2011

LEHI CITY

Client: TRAVERSE MOUNTAIN, LEHI UTAH
 Drawing Name: CULINARY WATER SCHEMATIC

PROJECT NO: 2010-037-002
 DATE: 12-5-11
 WAT-6

